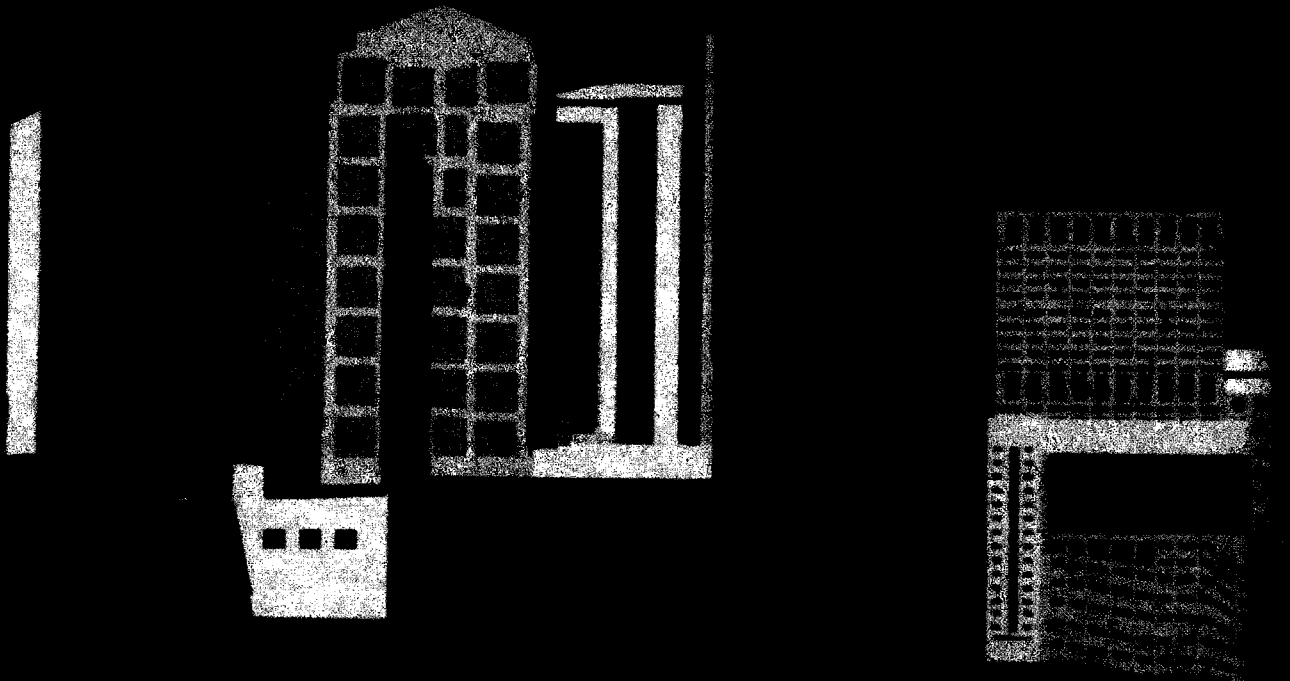


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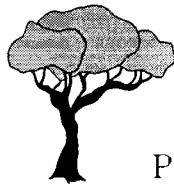
A General Plan
For
Nashville
and Davidson County



CONCEPT 2010

A General Plan for Nashville-Davidson County

*"The new Plan is intended to create a
planning environment with a clearer
vision and more dynamic strategic
implementation mechanisms"*



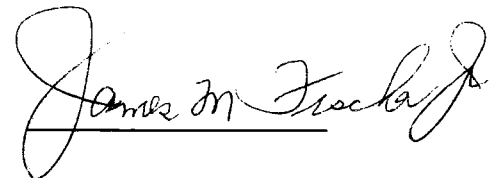
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METROPOLITAN PLANNING COMMISSION OF NASHVILLE AND DAVIDSON COUNTY, TENNESSEE

Resolution No. 92-135

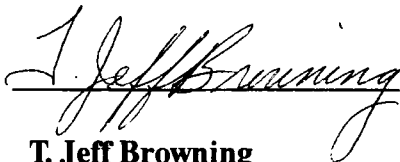
BE IT RESOLVED by the Metropolitan Planning Commission that it hereby adopts a general plan entitled "Concept 2010: A General Plan for Nashville-Davidson County Government" in accordance with Sections 11.504(e) and 18.02 of the Charter of the Metropolitan Government of Nashville and Davidson County, Tennessee as the overall basis for the Commission's development decisions; said plan supercedes all other previously adopted master, general or comprehensive plans. This plan is the first document in a series of studies that taken together will encompass the General Plan for Nashville-Davidson County.

The plans for Subarea 6 (adopted August 16, 1990), Subarea 9 (adopted November 7, 1991), Subarea 12 (adopted April 11, 1991), Subarea 13 (adopted February 28, 1991), Subarea 14 (adopted January 18, 1990) and the Major Street Plan Map (adopted September 13, 1990) are hereby incorporated as part of the general plan.



James M. Fischer, Jr.
Chairman

Date: February 19, 1992



T. Jeff Browning
Secretary

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PREFACE

THE PLANNING COMMISSION

The Metropolitan Planning Commission was established by authority of the Metropolitan Charter in 1963 and by state law as the official planning agency of Metropolitan Nashville-Davidson County. The number of Commissioners is set by the Charter at ten, eight of whom are citizens appointed by the Mayor and confirmed by the Metropolitan Council. The appointed Commissioners serve four year terms without compensation. The ninth seat is held by a member of the Metropolitan Council, who is elected by the Council. The Mayor serves as the tenth Commissioner.

The Commission is empowered to make recommendations to the Council on zoning issues, redevelopment plans, planned unit development (PUD) proposals, and all transactions contemplated by any Metropolitan Government Agency involving land use. The Commission, which is expected to provide community-wide vision, has advisory powers in these areas. The Commission is the final authority on subdivision proposals, and advises the Mayor on the Capital Improvement Budget.

The Planning Commission employs its own staff to help carry out its duties. The staff of professional planners provides the Commissioners with background expertise garnered from this community as well as trend analysis, experiences from other communities, and studies of technological improvements that could impact local land use decisions. The Planning staff makes recommendations to the Commission, but the Commission is not bound by the staff's suggestions and interpretations.

The Planning Commission is charged with the responsibility of preparing a general plan for the development of the community. A general plan is necessary in order to implement a zoning ordinance.

THE GENERAL PLAN

Much of the Commission's power is derived from this authority to create and adopt this General Plan for Nashville. A general plan, also known as a comprehensive or master plan, is an official public document adopted by a local government as a policy guide to decisions about the physical development of the community. It indicates, in a general way, how the community wants to develop over a period of time, usually twenty years. State law and the Metropolitan Charter require the Planning Commission to adopt the general

plan before a zoning ordinance can be put into place, and to make amendments or changes as desired. The format and content of the plan are at the Commission's discretion. Rather than formatting a plan in one document that might remain static for twenty or even thirty years, this Commission has chosen a general plan consisting of a twenty year overview, which is the guiding document, and various functional plans, locational or subarea plans and various implementation tools that would be reviewed on a more frequent basis.

This General Plan, through its overview, expresses the Planning Commission's county-wide vision or concept through the year 2010. It expresses the potential and desire for orderly growth, the necessity for the coordination of growth with ability to plan needed public infrastructure and basic services, and the balance between change and preservation to maintain the desired quality of living and working conditions in our community. While the Plan focuses primarily on Davidson County, throughout the document there is a recognition of the importance of Nashville's relationship with the surrounding region.

MISSION OF THE GENERAL PLAN

The role of the Planning Commission is to provide the vision for Nashville to continue to be a dynamic, well planned, attractive and fiscally healthy city. Through its general plan, the Planning Commission espouses its basic mission:

1. To Expand Economic Opportunities Throughout the County

Growth should be fostered by developing land use plans which provide adequate sites and infrastructure for the support of existing enterprise expansion and for the attraction of new or relocating businesses. The process for organized growth should be understood by the user, and facilitated through competent staff and progressive Commissioners. Just as important for successful economic development, the Commission assists in providing a quality living environment through good planning.

2. To Provide the Community Facilities and Services Necessary to Support Urban Growth in a Fiscally Responsible Manner

Successful pro-growth strategies must be accompanied by the adequate provision of infrastructure and services, or quality growth will not be assured. To minimize the need for continued tax rate increases to pay for necessary infrastructure, services, and maintenance, the Commission should create land use plans which encourage orderly, efficient patterns of growth and facilitate expansion of the tax base to fund needed services. Efficient growth makes the best possible use of existing services and infrastructure. The Commission also facilitates coordination among service providers and recommends adequate funding through effective capital budgeting.

**3 . To Ensure That Growth Occurs in a Manner Which Respects
the Natural Environment**

Growth must be carefully balanced with the need to conserve limited natural resources. The Planning Commission assists in conservation by creating plans and standards which match environmental features with compatible development.

**4. To Acknowledge the Importance of the Surrounding Region
in Nashville's Growth and Development**

The interdependence of the region's municipalities should be recognized and reflected in the Commission's plans and recommendations. While the Commission concentrates primarily on Davidson County, there must be a recognition of the interdependence of the region's cities and counties.

INTRODUCTION

- General Plan Format
- Purpose of the Overview
- Regional Perspective
- Quality of Life Components

GENERAL PLAN FORMAT

The General Plan for Nashville-Davidson County establishes guidelines for making decisions about land use, growth and development over the next twenty years. Just as importantly, the Plan makes recommendations for the future direction of other activities which are indirectly related to land use, such as education and economic development.

The General Plan is not a single document, but a group of related documents. Each document has a distinct purpose, but all are interrelated (*see Appendix B for further discussion*). All of the General Plan components are policy documents. That is, they set forth positions on fundamental issues, reflecting community sentiment. There also exists a set of companion documents known as implementation tools. Implementation tools put these policies into effect. Tools which are

available to implement general plan policies include the zoning ordinance, subdivision regulations, mandatory referrals, and the capital improvement budget.

The differences between policy and implementation are often subtle and may be difficult to discern. By way of example, the General Plan may set forth a policy that more parks are needed. It might further refine this policy to specify how many parks are needed, of which types they should be, and even decide where they should be created. These are all policy decisions; implementation tools would then be used to acquire land and fund the parks.

This document, the overview, establishes the most general level of policies, based on community input and consensus. It is designed to provide a basic foundation for making more detailed policy decisions related to the future of

"The policies contained in the functional and subarea plans are directed by the overview; while these plans may refine the content of the overview, they must not contradict or subvert the overview's policies"

the county. The information contained in the overview is stated in very general terms because it represents broad, long-term policies which are not likely to change much within the twenty year planning period. Other General Plan components, namely the functional plans and the subarea plans, concentrate on more specific, shorter term policies which are expected to require more frequent revision. The policies contained in the functional and subarea plans are directed by the overview; while these plans may refine the content of the overview, they must not contradict or subvert the overview's policies.

Specific topics which are mentioned in the overview but require more detailed study are addressed in individual functional plans. For instance, there is a policy expressed in the overview about the need to abate traffic congestion. The transportation functional plan refines this general policy and suggests changes and improvements to specific parts of the surface transportation network. Other functional plans address topics such as land use, housing, economic development, historic preser-

vation, parks and recreation, library system development and stormwater management. These plans are developed in conjunction with the concerned Metropolitan Government agencies and other involved parties. The land use functional plan is an exception in that it is developed wholly by the Planning Commission. The land use plan is made up of Principles of Land Use Policy Application, which are guidelines for making major land use decisions. Functional plans are adopted as part of the general plan, but are reviewed and updated at shorter intervals than the overview.

The overview and functional plan policies are applied to specific geographic areas of the county through the subarea planning process. For this purpose, Davidson County has been divided into fourteen smaller areas. For each of these subareas, the general policies in the overview, with additional input from functional plans, are refined into more detailed, area-specific policies and applied to a subarea. For example, a subarea plan will rely on the transportation functional plan for information

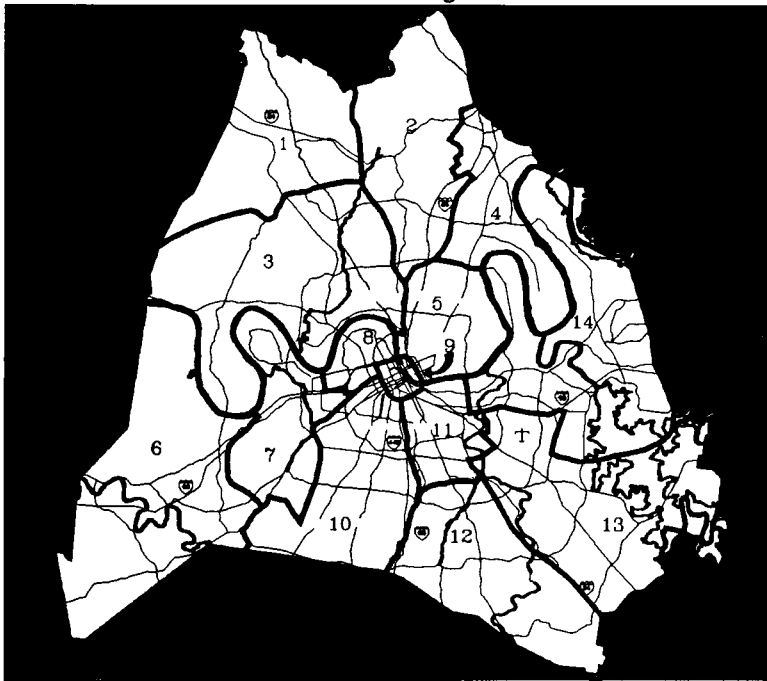
"The major goal of this plan is to preserve and enhance the quality of life, which, in turn, provides a solid base for economic development"

about changes in the area's roads. The subarea planning process also serves as a forum for direct citizen involvement. Once a subarea plan is adopted by the Planning Commission, it becomes part of the general plan. Like this overview document, subarea plans cover a twenty year period; however, like functional plans, they are reviewed and updated more frequently.

The policies expressed by the General Plan documents are implemented in a number of ways. The zoning ordinance, subdivision regulations, mandatory referrals and the capital improvement budget are all used to implement General Plan policies. As an example, a subarea plan is created based on overview policies and input from the functional plans. Suppose the transportation functional plan indicates that a certain

road should be widened, as a refinement of the overview policy of reducing traffic congestion. That subarea plan will incorporate the policy of widening the street. The capital improvement budget should implement the policy by funding the road widening in that sub-area.

Subarea Planning Areas



"The role of planning is to coordinate anticipated growth and development with the city's resources and work toward an optimal land use pattern"

PURPOSE OF THE OVERVIEW

The major goal of this plan is to preserve and enhance the local quality of life, which, in turn, provides a solid base for sustained economic development. "Quality of life" refers to the combination of various factors of the business, residential, and natural environments, such as education, housing, recreational and employment opportunities which make Nashville a desirable place to live and work. Continued economic growth and quality of life are increasingly inter-related and mutually reinforcing features of urban life. As the nation's economic base continues to shift from heavy industry and manufacturing to service activities, the locational choices of businesses have expanded considerably. In the competition for economic development, local amenities and living conditions are often what makes one city more attractive than another to relocating businesses. Firms want to locate where their employees will want to live and work. Therefore, to sustain long term economic viability, it is imperative that growth is planned in a way which will

protect and enhance the area's quality of life.

Growth expands the range of economic opportunities available in a community. Yet if that growth is not properly planned for, the economic benefits will be overshadowed by the problems associated with land use conflicts and overburdened services and infrastructure. The role of planning is to coordinate anticipated growth and development with the city's resources and work toward an optimal land use pattern. The success of these efforts is to a large degree dependent on communication and understanding between the public and private sectors, and among the various public agencies. The timely provision of services and the satisfactory resolution of community issues will often depend on the strength of these relationships.

The rapid growth that the Nashville area experienced in the mid-1980s significantly exceeded the expectations on which the previous (1981) General Plan were based, and has placed considerable pressure on the community's public ser-

"This document is designed to outline the goals of the community, to provide a framework for decision making"

vices. This General Plan was developed in response to these pressures, in an attempt to create a clearer, more accurate vision for the future. It does not constitute a substantial departure from recent city plans; instead, it is a recasting and reorganization of previous plans in light of changing conditions and additional community input. The new Plan is intended to create a planning environment with a clearer vision and more dynamic strategic implementation mechanisms.

Public input gathered during a series of growth management forums held in 1987-88 identified several major planning concerns for this city. First, growth has occurred more rapidly than the expansion of services and amenities. Much closer coordination between development and the provision of support services is needed. Second, continuing efforts on behalf of economic development and employment opportunities are needed. Third, there is a growing awareness that Nashville's natural environment is increasingly pressured as the area urbanizes. Greater vigilance is needed to protect our natural assets.

Fourth, greatly improved opportunities for public access to the planning process in Nashville are needed. Means for public input and participation in decisions by various segments of the community should be facilitated.

Another issue which has become more pressing in light of recent growth is the satisfactory resolution of land use conflicts. While all land uses play important roles in the growth and diversity of the city, it is necessary to provide better guidance on which are most appropriate in certain areas, and where and when one use should prevail over another use. Individual conflicts must be settled on the basis of what is best for the community as a whole. This document is designed to outline the goals of the community and to provide a framework for decision making.

These community concerns are addressed on the broadest level in this overview document. The general issues and goals for Nashville are discussed in the context of five themes: the natural environment, the residential environment, the business environment, urban

"Nashville must be seen not as an isolated unit, but as part of a region...goals for Nashville must be compatible with the aims of the region as a whole"

structure, and economic development. Economic development addresses the types of future growth which would be most desirable for Nashville. The natural, business, and residential environment themes represent the quality of life components. The issues contained in the urban structure theme deal with how to encourage both growth and the enhancement of quality of life through land use.

The themes outline general policies; they state what the major concerns are and the preferred approach for dealing with each. They outline strategies for achieving the overall goal of balanced, planned growth. Each theme is further divided into issues. For instance, the natural environment theme is broken down into six issues, including such topics as solid waste management and air quality. Likewise, each issue contains discussions of various sub-topics; i.e., under the issue of air quality there are discussions of standards and pollution reduction strategies. The preferred approaches and general policies for each issue are summarized in the form of goals and objectives. Goals are general

statements of what is desirable for the community or what is hoped to be achieved. Objectives give direction on how the goal might be accomplished.

REGIONAL PERSPECTIVE

In addition to the five themes included in the overview document, there is a need to emphasize another concept: the idea that Nashville's future is influenced to a large degree by external trends and events. The state of global and national economies, changing demographics, and the continued growth of the South all have significant effects on Nashville. In particular, it is the condition of the metropolitan area surrounding Nashville that has the most dramatic influence on the city. Nashville must be seen not as an isolated unit, but as part of a region. There needs to be a realization that goals for Nashville must be compatible with the aims of the region as a whole.

"Local and regional development decisions are more interrelated than they have ever been in the past"

The functional area which is most strongly linked to Nashville is loosely delimited by the Metropolitan Statistical Area (MSA). As of the 1990 census, the MSA covers an eight county region containing approximately one million people, for which Davidson County is the central place. As the region's central place, Nashville is the principal area of employment and the source of specialized goods and services for the tributary market. The tributary market should be thought of as a partner with the central place; neither can function properly without the other.

One result of the rapid expansion that has occurred in the metropolitan area is that its components have become more interdependent. Increasingly, the MSA is becoming a single economic and cultural unit, centering on Nashville. Local and regional development decisions are more interrelated than they have ever been in the past. There are certain issues which can be effectively addressed only from a regional standpoint: air and water quality, economic development, solid waste management, and transportation management. As interdependence in-

creases, more and more planning issues will be added to the list of "regional" issues, and the need for region-wide cooperation will become even more pressing.

A reflection of this growing interdependence is the emergence of organizations which make or coordinate policy on a regional basis. The Metropolitan Planning Organization (MPO) was created to address regional transportation concerns. The Greater Nashville Regional Council (GNRC) is a regional planning and economic development agency which serves a thirteen county area, including the MSA. Although these organizations possess little or no implementation power at present, their existence demonstrates an understanding of the need for regional planning and cooperation.

This General Plan acknowledges Nashville's place in the MSA and expresses a willingness to work toward solutions on a regional basis. Although this document is focused on Nashville, it should be understood that the city's planning efforts are firmly linked to the

"quality of life refers to a city's desirability as a place to live and work"

actions of the rest of the region. The following goals express an awareness of this interdependence:

- Regional planning organizations should be created and empowered as needed. Existing regional agencies should provide a basis for the expansion of regional planning efforts.
- Nashville-Davidson County, as the region's central place, should take a leadership position in the development of regional plans and organizations.
- During policy formation, the impact of each policy on the rest of the region should be considered.

QUALITY OF LIFE COMPONENTS

Because the enhancement of Nashville's quality of life is a central focus of the General Plan, it is important to examine the concept of "quality of life." Generally, quality of life refers to a city's desirability as a place to live and

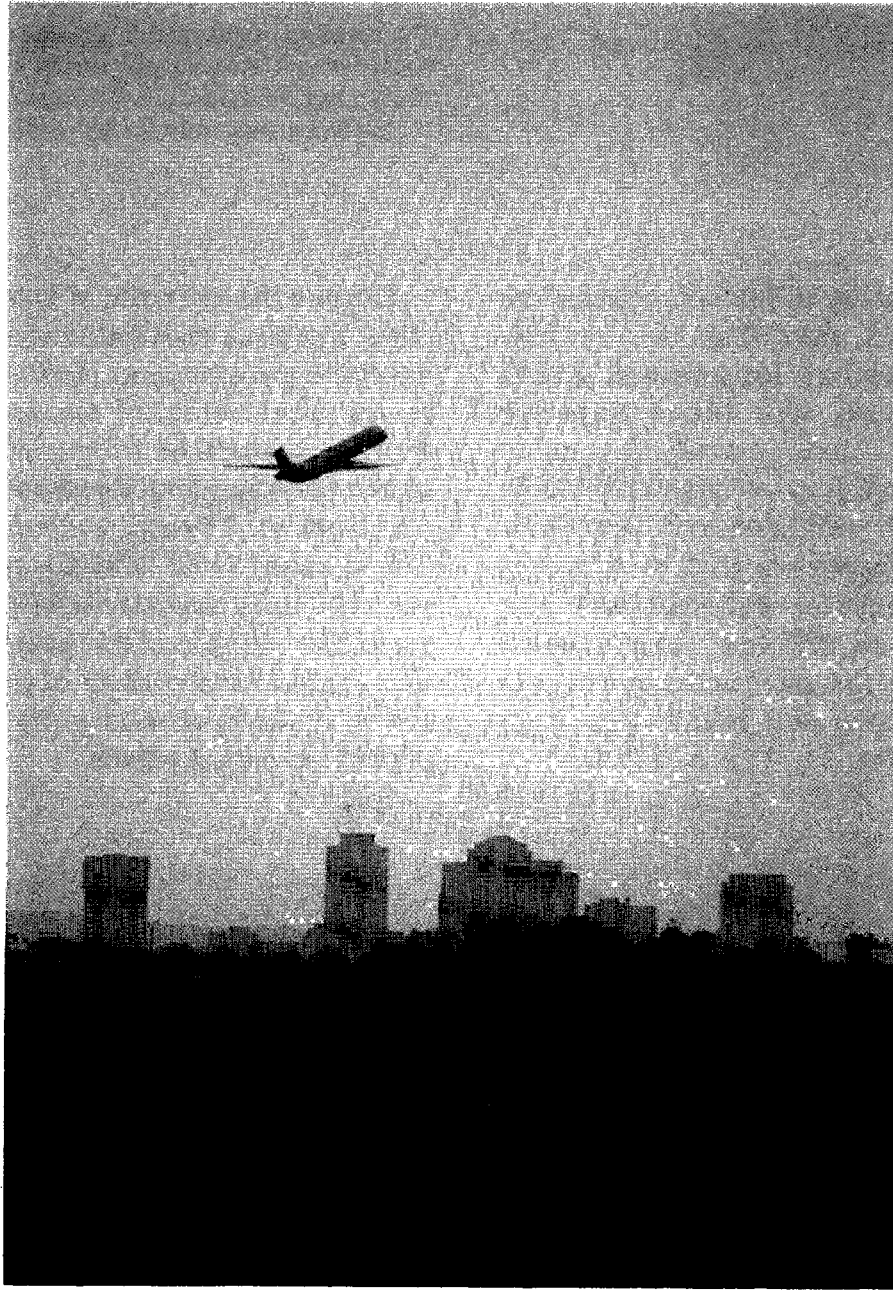
work. The factors which make a place desirable are weighted differently by each individual, according to personal needs and preferences. However, there are some quality of life components which are important to the functioning of the community as a whole, even if they are not highly valued by all individuals. For example, the level of available mass transit service may not be of immediate importance to those who never use it; yet a good mass transit system is a key element of efforts to reduce traffic congestion, minimize the need for parking space, and improve air quality.

It is those quality of life components which are important to the community as a whole on which this plan is focused. These components include such things as education, recreation, transportation, housing and employment opportunities. These and other quality of life components affect people in the context of their working environment, their living environment, or both. A third environment, the natural environment, interacts with both residential and occupational settings.

"The purpose of this plan is to provide for the enhancement of the overall quality of life by balancing the demands of the residential, business, and natural environments"

Many quality of life components are important in more than one environment. Education, for instance, affects both residents who attend Nashville schools, and employers who depend on the availability of an educated workforce. Both residents and employers share the common goal of ensuring quality education, although their motives may be different. The issue of education is therefore addressed in both the residential and business environment sections.

Despite the existence of many shared goals, there is a constant tension among the three environments. To focus solely on the preservation of the natural environment would be to restrict severely or even stop residential and commercial development. Unrestricted commercial development would be at the expense of the residential environment, and vice-versa. The purpose of this plan is to provide for the enhancement of the overall quality of life by balancing the demands of all three environments.



ECONOMIC DEVELOPMENT

- Regional Growth
- Future Directions for Growth

Sustained economic development relies on two strategies. The first is having a good quality of life. Excellent living conditions, a favorable business climate, and an attractive natural environment combine to make Nashville a prime location for new and relocating businesses. The second strategy involves presenting the city's advantages to the rest of the world. In order to maintain a satisfying quality of life, it is necessary to continue attracting economic activity which provides new sources of jobs and revenue. This section focuses on the latter strategy of marketing and promoting Nashville as a good place to live and work, while the balance of the General Plan is devoted to preserving and enhancing the city's quality of life.

Local governments are limited in their power to influence economic development on their own. As the region and Nashville grow, their local economies will be increasingly tied to

global and national trends and events. Additionally, as metropolitan areas grow, jurisdictions within a single region tend to compete with one another for economic activity; the central city is no longer the sole employment center of an urban area.

Nashville's continued economic health is dependent on its ability to deal with these changes. Its economic base must be diverse enough to withstand temporary downturns in certain sectors, or slumps in the national and international economies. At the same time, Nashville must concentrate on establishing a symbiotic economic relationship with the rest of the region. Rather than competing with the surrounding areas, Nashville must enhance and improve its performance in those functions for which it is best suited as the region's central city.

Planning for Nashville's future economic vitality must incorporate the following concerns:

- The metropolitan area must grow as a region: Nashville's growth is integrally tied to the economic conditions of the Mid-state area. Therefore, greater cooperation in economic development efforts among regional jurisdictions is needed.
- There is a need for greater understanding of Nashville's economic role within regional, national and global markets. Recruitment efforts should focus on attracting those activities which are best suited to these roles.
- Existing strengths should become the basis for future growth and development. Nashville's traditional economic activities--government, entertainment, transportation, higher education, religious publishing and health care-- should be expanded and reinforced.
- Decisions should be made as to which types of economic activity are most suitable for Nashville. Those activities which may damage rather than enhance the local quality of life will be detrimental to future economic development.

REGIONAL GROWTH

Economic Region

Nashville's economic region extends beyond the Metropolitan Statistical Area (MSA). While the MSA counties share infrastructural, environmental and transportation concerns, the economic region is linked by common trade and commerce concerns. This region can be loosely defined as the thirteen member counties of the Greater Nashville Regional Council, which is the economic development agency for the Mid-state region.

Central City Role

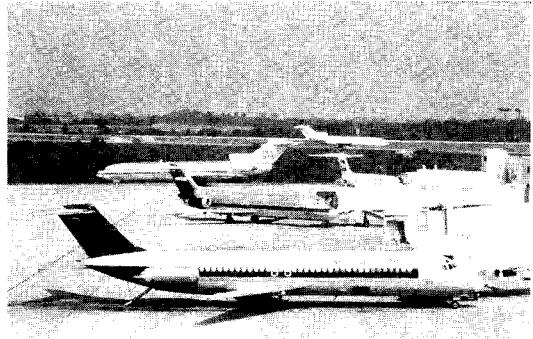
Nashville is the central city for the economic region, both geographically and functionally. The central city performs unique functions within the region, such as the provision of higher order goods and services, and serving as the major employment center. While industrial and residential uses are growing at a faster rate outside Davidson County than within, Nashville continues to provide the support functions for these activities. For instance, Nashville has more total retail space and more specialized forms of retail than any other place in the region. Similarly, Nashville has the highest concentration of higher order business support services, such as law, finance, banking, insurance and transportation. Davidson County is the sole source in the region for certain

forms of entertainment, arts, culture, and recreation, such as professional sports.

This functional specialization within the economic region must always be kept in mind when planning for Nashville's economic development. Rather than developing an economic strategy which pursues the same types of activities as are locating outside the county borders, Nashville should concentrate on attracting complementary activities.

Industrial Development

One aspect of the region's growth in recent years has involved an increase in the number of industrial jobs, most notably in automobile-related manufacturing. Because of environmental, land cost and site availability restrictions present in Davidson County, these industrial uses have located mostly in the surrounding counties. However, Nashville is well positioned to capture the "spin-off" benefits of these industries. This can be done through the recruitment of less intensive support industries and the expansion of the city's existing central place support functions. The city's physical limitations for many types of manufacturing can be offset by complementary industrial support or through providing more goods and services for the growing regional population.



Transportation

In terms of industry specific employment, transportation services are not among the largest sources of job opportunities in Davidson County. However, in terms of facilitating other types of economic activities throughout the region, transportation is an important industry. The Nashville International Airport is especially important to the regional business community, as well as to the tourism and convention industries, and the area's overall quality of life. Considerable potential also exists for air freight, cargo distribution, and aircraft maintenance industries. The placement of the American Airlines hub at the airport has been a financial and employment coup for the area, and the anticipated expansion will enhance its benefits. A return of commuter rail services would further aid economic development by providing an efficient, cost effective mode of travel to nearby destinations.

Nashville is one of only a handful of cities centered on three major interstate highways. Again, this asset is of considerable significance to the region's businesses and greatly enhances the area's

attractiveness for new activities. The extensive surface transportation network coupled with the city's central location relative to national population centers, would seem to make Nashville ideally suited for distribution and warehousing facilities. The scarcity of large expanses of low cost land within the county poses a barrier to this type of development on a large scale. As with manufacturing, surface distribution and warehousing activities are generally better suited to other areas of the region.

Regional Coordination

To form the economic region into a complementary unit, coordination and cooperation among the involved entities are essential. Planning for Nashville's economic development requires accurate assessment of the population and employment trends of the entire region. The economic region represents the market for Nashville's specialized goods and services; therefore Nashville's growth is dependent on the growth of the region. Coordinated development and recruitment efforts may be more difficult to facilitate than information gathering, but regional cooperation should be encouraged.

GOALS AND OBJECTIVES

1. Reinforce Nashville's position as the focus of a growing and economically interdependent region.

- * Facilitate greater communication among regional jurisdictions utilizing existing forums such as the Greater Nashville Regional Council and the Metropolitan Planning Organization.
- * As the region's central city, Nashville should assume a leadership position in regional economic development coordination.

2. Utilize the relative advantages of the region's component cities and counties for economic development. Determine what roles each jurisdiction can play.

- * Enhance Nashville's established region-serving functions through improved transportation access into the city, supported by a more efficient pattern of land use.
- * Work toward securing commuter rail service for Nashville.
- * Encourage regional industrial growth through public policies which facilitate support activities.

FUTURE DIRECTION FOR GROWTH

Target Industries

Based on Nashville's particular assets, certain industries are clear targets for recruitment efforts. Many of these

industries are currently important components of Nashville's economic base, but could be further expanded in size and scope. The following list is by no means all inclusive; rather, it is meant to show examples of the sorts of activities which are considered desirable types of economic development for Nashville.

Retail and Professional Services: A direct consequence of Nashville's position as a central city is the presence of thriving retail and professional service sectors. Nashville is clearly the retail hub of the economic region, despite the emergence of some commercial concentrations in the surrounding counties. Business and professional services, including law, finance, banking, insurance and real estate, are highly concentrated in Davidson County, especially downtown. Together, these sectors supply a significant portion of the employment opportunities available in Nashville.

These types of economic activities are especially desirable because they have little negative impact on the natural environment, are labor intensive relative to the amount of land required, employ a variety of skill levels and generate considerable tax revenues. In addition, the general outlook for these types of activities is quite healthy. Considering Nashville's role within the region and its limitations regarding manufacturing and industrial growth, it is likely that the city's future economic picture will prominently feature these sectors.



Aviation: Nashville possesses several advantages relating to the air transportation industry, including the modern facilities at Nashville International, the city's central geographic location, and the strong aviation and aeronautical engineering programs at area colleges and universities. The region has already attracted several aviation-related firms, but there are still many sectors of the industry which are not yet represented. To facilitate recruitment, some new or enlarged facilities may become necessary, including customs and immigration services for international travel, expanded runways, additional taxiways, and terminal and aircraft parking expansion. These changes must be planned for well in advance so that appropriate funding can be secured, and potential land use conflicts may be resolved.

Entertainment Production: The characteristics which have made Nashville renowned as the center of country music can also contribute to its success in other forms of entertainment production. The production and marketing expertise which currently exists is available in few other cities in the country. Further, Nashville has an advantage over other

production centers such as Los Angeles and New York in that the cost of living and labor costs are much lower.

Tourism: Strongly connected to the aviation, retail sales and entertainment production industries is the tourism industry. Nashville's status as "Music City" has long attracted visitors from all over the world. However, Nashville can ill afford to be complacent about its role as the country music mecca. Existing tourist attractions and accommodations should be strengthened, and a concerted effort made to pursue new ones.



Health Care: Davidson County's position as a leader in the health care and medical services industries stems from a number of factors, including its central place function, and the presence of two medical schools, major hospitals, and several health/medical related companies. The existing health care establishments provide an excellent basis for expansion into other segments of the health care industry, such as research and development and biotechnology.

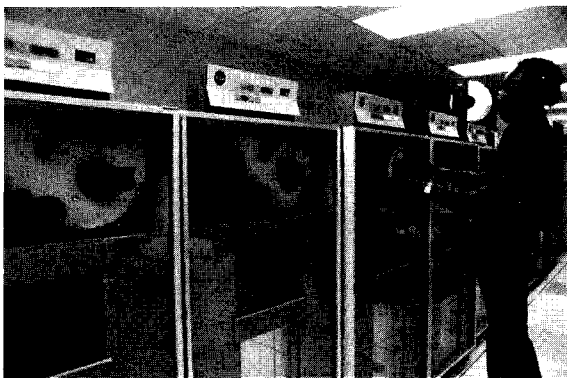
Higher Education: Nashville has a strong reputation within the southeastern United States as a community with many opportunities for higher education, including college, graduate, professional and trade school. This asset, in conjunction with the area's central location, provides an excellent opportunity for the future enhancement of education as an industry. This region should support institutional research and development, particularly in the medical and health care fields.

Printing and Publishing: As with entertainment production, the existing facilities used for religious printing and publishing can be built upon to create an expanded focus. Any large-scale increase in these activities will most likely necessitate a functional specialization within the region; larger printing operations requiring expansive sites may be better located outside Davidson County, while administrative and support functions are best suited to Nashville.

Back Office Operations: A general area of economic activity which seems well suited to Nashville is "back office" operations. Nearly every large company, regardless of which industry it is involved with, requires back office operations. Back office operations are those which provide clerical, administrative and/or technical support for the rest of the company. Examples include accounting, payroll, data processing and customer service functions. Information technology has advanced to the point where these types of functions no longer need

to be housed with front office or production facilities. Instead, back office locations are increasingly decided upon on the basis of labor cost, skill and availability; land costs; and the availability of support services. Nashville seems to be well situated to attract such activity, due to its relatively low cost of living and workforce availability. Like other service sector activities, back office operations are desirable because they have a limited impact on the natural environment and employ large numbers of people relative to the amount of land they require. As such, back office operations should be targeted for recruitment efforts.

Once industries have been targeted, public and private development agencies should coordinate recruitment efforts. Government agencies such as Public Works and the Planning Commission can assist in these efforts by identifying suitable locations for prospective businesses and facilitating the provision of needed infrastructure.



Site Reservation

In order to attract targeted industries it is necessary to reserve suitable land in sufficient quantity and at a variety of locations to provide for a range of needs and choice. Designating appropriate locations for these uses in Davidson County is especially critical because of the relatively limited supply of suitable industrial land. Such locations should be protected from development incompatible with industrial or manufacturing use. Land use policies which promote the efficient utilization of land resources are essential if these types of activities are to be pursued at any level.

Service and retail sector activities are less exacting than manufacturing or heavy industry in their physical site requirements, but are expected to grow at a much faster rate, and therefore will ultimately require more land. Because white collar activities will likely be the driving force behind Nashville's economy, it is important that a land use monitoring system be used to track growth and movement of these businesses so that recruitment efforts aimed at these activities can be matched with suitable sites.

Support Of Entrepreneurship

Nashville's success as a location for the development of new businesses has traditionally been an important element of the city's growth. This pro-entrepreneurial climate has resulted in the presence of a combination of

management expertise and a supportive investment community willing to assist innovative ventures. Many of these new ventures are small businesses which have become increasingly important sources of employment and tax revenues. Startup ventures of all sizes should continue to be encouraged, and small businesses in particular should be supported. Key challenges involve maintaining flexibility in financing and understanding and supporting the conditions and services necessary to fostering entrepreneurial endeavors.

GOALS AND OBJECTIVES

1. Target new industries for recruitment into the region and particularly Davidson County.

- * Enhance and centralize recruitment and economic development functions.
- * Focus recruitment efforts on industries whose needs match closely with Nashville's strengths, such as back office operations, aviation and medical technology, entertainment production and publishing.

- * Protect the natural environment by concentrating on the recruitment of "clean" or low impact activities.

2. Encourage economic growth through the expansion of existing businesses and industries.

- * Encourage local entrepreneurship and small business development through flexible financial, investment and management support.
- * Monitor conditions and trends affecting Nashville's major industries, and be responsive to those changing conditions.

3. Continue development of Nashville's growth industries by exploring opportunities for related activities.

- * Focus recruitment efforts on activities which can build upon existing infrastructure and expertise, such as printing, publishing and entertainment production.
- * Reserve sites to match the anticipated needs of new businesses and maintain a competitive land market.



Hatch Show Print has been producing posters and showbills for the entertainment industry since 1879



RESIDENTIAL ENVIRONMENT

- **Housing and Neighborhoods**
- **Parks and Recreation**
- **Education**
- **Cultural Amenities**
- **Transportation**
- **Primary Urban Services**

The residential environment is perhaps the most visible expression of a city's quality of life. The quality and cost of housing, and the types of services and amenities available are extremely important to present and potential residents. A good residential environment therefore helps to attract new businesses and retain existing ones, making it essential to economic development. In addition, residential neighborhoods and neighborhood-based organizations frequently serve as forums for dealing with public policy issues such as land use and community needs assessment.

Nashville enjoys a reputation as an excellent place to live, due to its attractive natural setting, pleasant neighborhoods, relatively low cost of living, and the quality and availability of services and amenities. To maintain this positive living environment, Nashville must continually respond to the changing conditions and demands which produce new

challenges in maintaining the quality of life. For instance, shifts in the area's economic base have resulted in the need for an educational system which is more responsive to the changing job market. Changes in household composition and size have increased the demand for more diverse housing options. Urbanization has forced new thinking on the need to preserve recreational and open space. Among the challenges ahead will be:

- Encouraging the variety of housing types and cost levels necessary in an increasingly urban environment
- Improving the quality of education to better prepare students for a rapidly changing job market
- Creating a transportation system which is sensitive to the demands of a growing population and the

need to enhance environmental quality

- Planning for the provision of services and amenities to a growing and diverse population
- Preserving and enhancing the integrity of residential neighborhoods

HOUSING AND NEIGHBORHOODS

Housing Types

An urban population consists of different types of households with varying lifestyles and needs, creating a demand for diverse housing types. As the population grows, this demand will intensify. To maximize the locational choices of the population, different housing types should be accommodated throughout the county. At the same time, care must be taken to maintain compatibility among different housing types and densities within neighborhoods.



Special Residential Arrangements

An emerging trend expected to have an effect on housing and residential areas through the planning period is the resettlement of certain traditionally institutionalized persons into small group care homes within residential communities. Public policy should support the provision of these small group homes and other temporary living facilities which provide services to the community, such as shelters, orphanages and transitional homes. However, their concentration in individual neighborhoods or communities should be avoided.

Affordable Housing

Important to achieving sustained economic development and improving the quality of life is the provision of affordable housing. A diverse economic base must be supported by workers of all skill and income levels. While market forces generally provide for a sufficient amount of middle and upper income housing, there tends to be a perpetual shortage of sound, less expensive housing. In addition, economic trends continue to push housing costs beyond the reach of more of the population, making the need for affordable housing more crucial than ever.

The lower cost housing that does exist in Davidson County tends to be concentrated in the inner city and inner suburbs. In order to avoid creating concentrated low income "ghettos," affordable housing should be dispersed

and decentralized. Some moderate and lower cost housing should be provided in all communities throughout the county, and near all employment centers. The greater need for community services generally required by lower income households should also be considered in locational decisions.

The satisfactory provision of lower cost housing relies on a combination of strategies and approaches, including new construction, preservation of existing housing stock, innovative financing programs, special development standards, and direct and indirect subsidies. Greater recognition should be given to manufactured homes as a resource for lower income households. As a housing alternative which could reduce reliance on subsidy programs, they should be explored. No single approach is likely to adequately address the growing need for affordable housing. Intensive and persistent study is required to understand both the need for affordable housing and the most suitable approaches for its provision.

Preservation of Housing Stock

Traditionally, much of the supply of affordable housing comes from the "filtering" process, whereby a single residential structure goes through successive tenants of progressively lower income levels as the dwelling unit ages and becomes less economically valuable. Therefore the preservation and rehabilitation of existing dwelling units

are central to the provision of affordable housing, and should be encouraged. Demolition of housing should be seen as a last resort, when rehabilitation is wholly unfeasible due to the condition of the structure itself or the condition of the surrounding area. To preserve the housing stock in as sound a state as possible, housing and building codes should be carefully enforced.

In the reverse of the filtering process, reductions in lower cost housing concentrations may occur as a result of private, individual efforts to upgrade and rehabilitate marginal or low income neighborhoods. Redevelopment of these areas should be carefully monitored for the displacement of lower income households. To the greatest extent possible, dislocation should be avoided. Resources should be made available to residents adversely affected by revitalization.

Neighborhood Monitoring

Nashville residents tend to identify strongly with the neighborhoods in which they live. "Neighborhood" refers not only to dwelling units, but to the synergy of residential uses with other neighborhood components such as local commercial sales and service outlets, recreational facilities, schools, roads, and public utilities, which together comprise a cohesive living area. To maintain a stable living environment, neighborhoods may need protection from disruptive or blighting influences such as heavy

traffic, obsolete public facilities, high crime rates and land use conflicts. It is important that neighborhood conditions be monitored for signs of decay or blight, and that a course of action be devised which will mitigate these negative influences and promote neighborhood stabilization. The formation of neighborhood groups and their participation in the planning process is strongly encouraged.

GOALS AND OBJECTIVES

1. Provide a variety of housing to accommodate different needs, lifestyles and income levels in all communities throughout the county.

- * Allow special living arrangement facilities to locate in residential communities, while avoiding their concentration in individual neighborhoods.
- * Monitor the impact of development standards on the cost of housing.
- * Aggressively pursue public and private funds for the construction and rehabilitation of affordable housing units.
- * Continue to promote the decentralization of lower cost housing.
- * Encourage affordable housing through various means.

2. Improve and preserve the quality of the existing housing stock.

- * Promote neighborhood stabilization and the maintenance and preservation of exist-

ing housing by implementing an expanded codes inspection and compliance program.

- * Institute a concentrated codes enforcement program to assure the improvement or elimination of dilapidated structures.
- * Monitor the lending environment and determine when and where public intervention is necessary to facilitate the rehabilitation of housing stock.

3. Create and preserve stable neighborhoods through the identification and abatement of blighting influences.

- * Encourage community groups to participate in neighborhood conservation efforts.
- * Closely monitor changing neighborhood conditions.
- * Plan a comprehensive course of action to mitigate blighting influences through appropriate means such as codes enforcement.



PARKS AND RECREATION

Location of Parks

The effectiveness of any park to provide recreation opportunity depends upon the location of the facility in relationship to other parks and to the people it is designed to serve. Recreation areas should be dispersed to conveniently serve the present and future population. Generally, the greatest accessibility can be achieved by locating all facilities at or near the geographic center of the population being served.

Park System Development

The Metropolitan Park System consists of three functional types of parks: playground parks, playfield parks and large urban parks. This hierarchy reflects different levels of use, and necessitates different standards for each type. The local government subscribes to National Recreation Association (NRA) guidelines specifying the size, number and placement of each type of park. The determination of existing and future park needs is based on three broad principles:

- recreation areas should be dispersed so as to conveniently service the needs of the community
- recreation opportunities should be available to all segments of the population,

regardless of age, income and physical condition

- resource development policies should be based on the preferences of the population served by the recreation area

The adequacy of Nashville's public recreation facilities should be evaluated in terms of the needs of their users rather than by absolute acreage. The planning process should incorporate the NRA standards, adjusting the requirements according to special community needs and conditions. Residents and their representative organizations are encouraged to give input on the development of parks in their area.

Site Reservation

Suitable recreational sites should be reserved based on anticipated community needs in emerging or future residential areas. In existing communities lacking adequate park space, sites should be identified for acquisition and conversion to appropriate recreational uses.



Joint Use

Economies are often achieved through the joint use of public facilities. Parks are readily adaptable to this concept and may be effectively developed in combination with other public facilities, particularly schools. The capital budgeting process should give special consideration to the development of multipurpose public facilities.

Passive Vs. Active Recreation

Recreation planning must recognize the need to provide for different activity types. Most activities fall under the broad categories of passive and active recreation. Active recreation requires the provision of specialized equipment and/or facilities, such as basketball hoops, tennis courts and golf courses. Passive activities, such as hiking and running, generally require open space with minimal or no modifications. Each activity type requires different acreage and capital investment and has a different demand base. The suitability of available

park land, available financing and community needs should determine which activities are provided in each park. The opportunities for passive activities can be further enhanced outside parks with the provision of bicycle lanes and sidewalks.

Open Space

Parks are an integral element of the open space network in Davidson County. Open space can serve a number of functions, including protection of natural resources, enhancement of urban landscapes, and land use transitions, as well as providing a variety of recreational opportunities. Therefore, park facilities should be multi-functional to complement other forms of open space such as floodplains, rugged terrain, scenic areas and institutions with extensive grounds. Urban design activities should be particularly concerned with achieving an overall network or system of open space. Priority should be given to developing linear parks linking major areas of open space, such as the Warner Parks, Radnor Lake and the riverfront.



The Cumberland System

The Cumberland River, tributaries and reservoirs constitute a major recreational resource in Davidson County. Acceptable water quality standards must be maintained in order to preserve the waterways for fishing, boating and

other water-related activities. Public access points and facilities such as docks and boat launches should be maintained, and new ones constructed as required by reasonable public demand.

The river banks are another valuable recreational asset in themselves. The scenic vistas along the riverways have considerable aesthetic value, and are ideally suited to passive recreation. The preservation of floodplain areas as open space is a particularly attractive concept, from both environmental and recreational/scenic standpoints. The goal of floodplain protection would be greatly aided and complemented by the creation of a county-wide greenbelt system along the Cumberland River and its tributaries. The identification and reservation of areas appropriate for conservation and recreation should be undertaken.

The river is also the site of some traditional industries which provide jobs and revenues for the city. These existing enterprises should be accommodated, but future industrial development in the floodplain must be evaluated against the community's long-term goals regarding water quality and environmental conservation, as well as its recreational and open space needs.

State and Federal Facilities

Nashville is fortunate to have a large amount of federal and state park land in the area. Some of the city's most popular facilities, such as Radnor Lake and parts of J. Percy Priest Reservoir, fall into this category. Close coordination among federal, state and local officials is needed to maximize the serviceability of all public recreational land. Such coordination also reduces the need for recreational land acquisition by the Metropolitan Government, and presents the opportunity to provide recreational facilities which would not be feasible for the city alone to develop.

Private Facilities

The recreation facilities of private or semiprivate organizations often provide a supplement to public facilities. The development of such facilities should be



Radnor Lake State Park

encouraged to the extent that legitimate demand can be shown to exist for the proposed facilities, and that compatible land development patterns can be served. Private recreation facilities should be inventoried and their clientele evaluated as input for planning public facilities.

Spectator/Professional Sports

Nashville hosts several collegiate and professional sports teams as well as many amateur and professional events and tournaments. Because spectator sports are widely valued as entertainment forms, their presence adds to the overall quality of life. There is a definite national trend towards the public provision and support of facilities for such activities. As the cost of sporting facilities is generally quite high, projects requiring the commitment of public funds must be exhaustively analyzed. There should be a reasonable expectation that the facility can become self-supporting, either directly or indirectly. Where possible, existing facilities should be adapted or expanded to accommodate anticipated needs. If the need for new facilities becomes apparent, multipurpose projects are preferred, as they are more cost-effective. New facilities should be planned to complement existing development.

GOALS AND OBJECTIVES

1. Continue to develop the Metro park system as guided by the principles of convenience, community needs and objectivity.

- * Utilize the National Recreation Association guidelines and standards for parks. Acreage and size standards should be secondary to community needs and conditions.
- * Promote the joint use of parks and other public facilities, especially schools.
- * Enhance the opportunities for passive recreation through the creation and implementation of a Metro-wide pedestrian and bicycle plan, and the wider provision of sidewalks.
- * Locate community and neighborhood parks at the point of greatest centrality and/or accessibility.
- * Identify and acquire suitable park land in areas expected to develop residentially.

2. Develop park facilities to be multi-functional and complement other forms of open space to achieve environmental and land use goals.

- * Maximize the serviceability of public recreational land through close coordination among federal, state and local officials.
- * Ensure that water quality, access and facilities which relate to aquatic recreation, are sufficient to support the continued viability of such activity.
- * Preserve floodplain and other areas necessary to a greenbelt system linking major open spaces.

- * Identify and acquire additional natural areas.

3. Encourage the development of appropriate private recreational facilities.

- * Inventories of existing public and private recreational facilities and of community needs should be used as input for the planning of future facilities and prioritizing the upgrading of existing recreational areas.
- * Recognize the role of spectator sports as a component of the overall quality of life, and support the growth and diversification of such activities.

EDUCATION

Quality of Public Education

The principal challenge for public education in Nashville is to meet the demand for improved quality. Comprehensive programs stressing fundamental literacy and math skills are essential. It is also important that as many students as possible should be challenged to prepare for further education. To aid in these goals, a system of large, comprehensive high schools has been established which increase student mobility and access to career-oriented programs. Additionally, magnet schools and specialized programs should be available for students who can benefit from them.

Future Needs

Due to substantial rise in the local birth rate expected to last until the mid-1990s, school enrollment should increase during the planning period. A shortage of classroom space, especially on the elementary level, will become evident. Providing for the new growth, facility improvements and the replacement of obsolete structures will be the major capital improvement needs of the next twenty years. The subarea planning process should identify specific community needs and growth patterns. These patterns should be used to predict future facility needs.

It is recommended that where additional facilities are expected to be required, tracts of land be purchased or optioned well in advance. Advance planning could assure the availability of suitable sites as well as more favorable purchase prices.



School Locational Requirements

School sites should be centrally located and accessible to their attendance area. While centrality is desirable, it may be necessary to sacrifice centrality for other qualities or features, particularly superior size and environment. The preferred site will be the one providing the shortest route between the residential area and the school, but distance of the route is secondary to travel safety. Travel paths should avoid hazards and undesirable conditions relating to traffic congestion or volume, railroad corridors, noise and industrial land uses. Safety precautions include sidewalks and bikeways along the travel route or from homes to bus stops. The site should also allow for physical expansion of the structure, should there be a need to increase capacity.

School Closings

Declining enrollments, shifts in population and programmatic obsolescence of facilities may lead to school closings in particular neighborhoods. Such actions pose significant impacts for the residential areas involved. While low enrollment schools may be less cost effective to operate, factors in addition to economics need to be considered before deciding which schools are retained and which are closed. These factors include:

- the age and condition of the structure
- the quality of the education programs

- projected changes in neighborhood land use and population
- effects on racial integration plans
- the presence of or potential for community programs to make use of excess space.

When schools are closed, the challenge is to convert or adapt the building for some other public use consistent with neighborhood stability. Input from neighborhood residents or organizations should be sought before final decisions are made.

Joint Facility Use

Efficient use of school facilities is hampered by the fact that they are normally used only during specific times of the day and year. Joint use of school facilities by other community services would increase the benefits returned from tax dollars and create focal points for neighborhood interaction. A notable example of joint use is the before and after school care program currently operated by parent and community education organizations.

Private Education

Nashville has a full complement of private and parochial elementary and secondary schools which provide additional options for students. Because these schools draw students from large

geographic areas, it is important that they are adequately serviced by public transportation. The same general access guidelines should apply to public and private schools equally.

Post-secondary Education

One of the historic attractions of Nashville for new residents has been its respected leadership role in higher education. Nashville today is the home of several universities, medical and law schools, and numerous junior colleges and technical schools. These institutions appear likely to remain strong and capable of continuing to attract exemplary new residents and visitors in the future. Further, the schools enrich the cultural life of the entire city with plays, exhibits and symposia. Nashville's leaders and planners continue to work closely with campus planners to achieve the effective meshing of these large institutions into the urban fabric, and have also developed numerous special studies for the areas around them. The beneficial results of these efforts are evident, and serve as a basis and incentive for work to maintain and improve those relationships.

Library Service

The public library program provides a wide range of materials and services for educational reference, entertainment and cultural enrichment. The functions of the public library system include



providing facilities which are easily accessible to the public, selecting material appropriate to the needs of the community, organizing these resources so they can be used effectively, and providing services which stimulate and guide study.

Since it is desirable that library facilities be accessible to the largest possible number of potential users, a system of branch libraries has been developed to serve specific community needs. In addition, the main library is located downtown, ensuring accessibility to a large number of people. Branch locations should continue to be supplemented by bookmobile service to remote areas.

Library Locational Requirements

Libraries should be sited at points of high accessibility to their service area.

Consideration should be given to locating branch libraries in or immediately adjacent to commercial concentrations, particularly activity centers. The location should be easily accessible by mass transit or automobile; library sites should be on or near important traffic intersections which maximize access without impairing safe and convenient pedestrian movement. They should be large enough to provide adequate space for off-street parking.

System Expansion

Due to both the importance of libraries to community livability and their special locational requirements, it is essential that future branch libraries be sited well in advance of anticipated need. In order to secure suitable land at a reasonable cost, new branch locations should be identified and acquired in the early stages of a service area's growth and development. In addition, as the population grows, existing facilities may need to expand so that service levels do not deteriorate. Thus population and development trends must be carefully monitored and incorporated into long-range library facilities planning.

Adult and Continuing Education

Public responsibility for education does not stop at the provision of schools and libraries; rather, it extends to such diverse areas as public television and radio, adult literacy, and job training.

Educational television and radio provide excellent venues for making specialized information and entertainment available to the majority of the population at no charge. While public stations generally rely on audience contributions for support, governmental funding is also important.

Public colleges and universities are often the best providers of higher education for non-traditional students. These institutions may require local governmental assistance in performing this function, as community-based educational programs or extension services sometimes need the part-time use of public facilities to hold weekend and evening programs. Metro schools, libraries and other public structures should continue to be made available for this purpose. Community groups are encouraged to become involved in local continuing and adult education efforts.

GOALS AND OBJECTIVES

1. Improve the quality of education for all students.

- * Structure curriculum to accommodate diverse backgrounds, needs and interests.
- * Expand magnet school and other special needs programs.
- * Carefully monitor population and enrollment trends to accurately project educational needs.

2. Accommodate present and future building, classroom, and facility requirements, taking into account community needs and concerns.

- * Facilitate the coordination of public transportation with public and private educational facilities.
- * Minimize the negative impacts associated with school closings by developing precise criteria to guide school closing decisions. Such decisions should consider factors other than economics.
- * Where possible, adapt obsolete schools for other uses consistent with neighborhood stability. A process for determining the future use of surplus school buildings should be formalized.
- * Promote the joint use of school facilities by other community services.

3. Expand the role of post-secondary educational institutions in the larger urban community.

- * Continue to support adult and continuing education programs and institutions through financing and the joint use of facilities.
4. Provide accessible library service to all communities.
- * As the library facility with the greatest visibility and largest service area, priority should be given to maintaining and improving service at the downtown main library.
 - * Carefully monitor growth and development in the county so that new and/or expanded library facilities can be planned for well in advance.



The Hermitage, home of Andrew Jackson

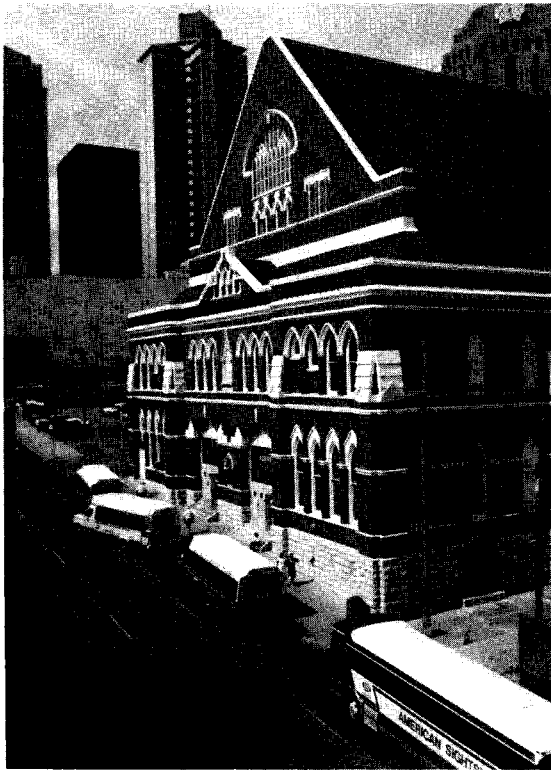
CULTURAL AMENITIES

Definition

Cultural amenities are those features of urban life which have a value beyond the strictly utilitarian and are intellectually enriching and pleasurable, thereby enhancing the livability of an area.

Historical Preservation/Emphasis

The historic homes and neighborhood design elements of Nashville contribute heavily to its uniqueness and sense of place. Historic homes include not only "museum quality" structures like Cheekwood or the Hermitage, but functioning homes and neighborhoods such as Edgefield and Germantown as well. Significant or unusual structures and areas should be preserved and restored, although adaptations should be allowed in order to make them functional. Where appropriate, these efforts should



Ryman Auditorium, the former home of the Grand Ole Opry, is a popular tourist destination

focus on cohesive districts or clusters of structures, so that the functional relationships among the structures may be retained. Comprehensive preservation efforts require cooperation among the Planning Commission, the Metropolitan Development and Housing Agency, and the Historical Commission.

While the preservation of architecturally or historically significant structures greatly enhances the character of the city, efforts to promote historical sites and events should be encouraged as well. Visual reminders of the city's history and culture serve to educate and to promote a sense of pride and identity for

residents. Nashville's reputation as the "Athens of the South" and "Music City" is enhanced by buildings such as the Parthenon and Ryman Auditorium, the former home of the Grand Ole Opry. Because Nashville began as a river port, the Cumberland River itself is of great historical significance. The replica of Fort Nashborough in Riverfront Park is an example of a structure which emphasizes the origins of the city. Projects such as these which symbolize the unique history and culture of Nashville should be supported.

Archaeological Preservation/Emphasis

Reminders of Nashville's past can be found not only in existing structures, but underneath the earth as well. Nashville contains many significant archaeological sites which should be preserved, notably those left by indigenous peoples, early settlers and Civil War battles. The presence of such sites should be considered prior to new development. Consultation with the State Division of Archaeology, which keeps a comprehensive list of such sites, is encouraged. The presence of cemeteries and burial sites is an important consideration for developers, as they are protected by state law.

The Arts

Nashville has a good inventory of public and private arts facilities, organizations and events which can be built upon and enhanced as the population grows and diversifies. This inventory should be periodically assessed, and gaps or inadequacies identified and remedied. Nashville's many religious and educational institutions constitute important sources of cultural activities and events. Community-based organizations are also encouraged to support artistic education and events. The efforts of these various parties should be coordinated with public provision of the arts, with the Metro Arts Commission acting as the major vehicle for coordinating these efforts.

Public sector support of the visual and performing arts should focus on providing a variety of activities which appeal to and are accessible to a large number of people. The educational value of these events and facilities is of vital importance; every effort should be made to present opportunities for viewing and participating in artistic productions to people who might otherwise not encounter them.

Nashville's many educational institutions, music enterprises, performers, artists, and arts educators make the city a logical center for arts education. Arts education programs would help to make Nashville a more exciting, culturally vibrant place to live.

Museums

Museums should function not only as housing for the visual arts, but as centers of learning for history, natural and physical science and local culture. As school children are generally the most frequent users, museums should attempt to accommodate them as much as possible, through the use of interactive exhibits and educational programs. To maximize the serviceability of Nashville's museums, coordination among involved



The Cumberland Science Museum features hands-on, interactive exhibits for children

local and state officials and private organizations is necessary.

GOALS AND OBJECTIVES

1. Preserve and enhance historically, archaeologically and/or architecturally significant structures and areas.

- * Continue to identify, document and protect historic resources in the county, including individual structures, districts, features and landscapes.
- * Focus on the preservation of cohesive districts so that the functional relationships among the structures may be retained.
- * Coordinate preservation efforts among the appropriate agencies.
- * Seek incentives which encourage the preservation and/or reuse of historic structures.

2. Promote the use of historical and archaeological sites, structures and events which reflect Nashville's origins and cultural roots.

- * Recognize the cultural contributions of religious and educational institutions, and coordinate their efforts with publicly supported cultural institutions, events and performances.

3. Make museums and the arts accessible and appealing to the population.

- * Support and encourage cultural festivals as vehicles for bringing the arts to the public at a low cost.
- * Periodically inventory the state of the arts in Nashville, identify areas where expan-

sion and/or diversification is needed, and recommend appropriate strategies for improvement.

- * Maximize the serviceability of Nashville's museums through the coordination of appropriate state and local officials and private organizations.
- * Support the growth of arts education programs drawing on Nashville's wealth of artistic talent.

TRANSPORTATION

Demand Management

Traditionally, traffic problems have been dealt with solely through the expansion of infrastructure. For example, if a major road became so heavily used that traffic jams were daily occurrences, the traditional approach would have been to widen the road to accommodate extra lanes. More recently, public policy has begun to include "demand management" strategies which emphasize changing people's travel behavior as a way of more efficiently utilizing existing capacity. Changes in travel behavior include coordinating growth with the capacity of the transportation system, increasing mass transit ridership, staggering work hours to reduce peak hour demand, and encouraging ride sharing.

The traditional facilities oriented approach has become increasingly costly, and does not accommodate environmen-

tal concerns. On the other hand, the end result of an effective demand management program is a reduced reliance on automobile travel, thereby preserving air quality and promoting more efficient use of fossil fuels. Additional facilities will continue to be needed, but demand management strategies can reduce the number of facilities required.

Demand management should focus on both short-term actions designed to mitigate existing congestion problems, and on more strategic approaches to avoid future congestion. A comprehensive demand management strategy involves:

- The provision of alternative means of transportation (i.e. mass transit, pedestrian walkways, etc.)
- The removal of barriers and the provision of a set of incentives to encourage commuters to shift to the alternative modes
- Growth management policies designed to maintain a balance between transportation demand and facilities
- Strategies to reduce peak hour trips, such as staggering work hours or ride sharing

Demand management strategies are desirable approaches to managing traffic problems in terms of protecting environmental quality, as they tend to reduce reliance on automobile travel and require less new construction. As such, re-

lated strategies should be included in the Major Street Plan and other transportation policies.

Mass Transit

A comprehensive mass transit system is not only an integral part of any demand management program, but enhances the transportation options and increases the mobility of the population. Public transportation or mass transit is used here to refer to all forms of high-occupancy and shared ride services, including car-pooling, rail/fixed guideway, buses and paratransit.

The long range goal for Nashville is the development of a fixed guideway system, possibly light rail, serving the most densely populated corridors, the airport, and downtown. However, in the interim, and even with the advent of such a system, there will still be a need for supplementary mass transit modes and services. The present system of buses, trolleys and paratransit services should be expanded in conjunction with incentive programs to increase ridership. Top priority should be given to establishing full service to designated activity centers and in those corridors most likely to support a high-occupancy mass transit system. Attention should also be given to increasing service to "low mobility" populations. Low mobility groups are those segments of the population which cannot rely on automobile travel because they do not own cars or are not able to drive due to age or handicap.

The cost to the mass transit user can be as much of an impediment to ridership as lack of service. Therefore efforts should be made to keep public transportation fares generally affordable, especially to low mobility groups.

Sidewalks

Walking has both recreation and utilitarian purposes and should be provided for as part of the overall enhancement of livability. Sidewalks were provided along many streets and roadways in the older sections of the county at the time of their development, but many of them have not been maintained and have fallen into disrepair. In newer residential and commercial development, the provision of sidewalks frequently was not required. The lack of sidewalks in these areas has caused justifiable concerns regarding pedestrian safety. The subarea planning process should prioritize new sidewalk construction and increased maintenance/repair needs. Special attention should be given to the provision of sidewalks in designated activity centers and moderate and high density residential areas. In addition, sidewalks should continue to be required for new residential construction, except in areas of low density development.



Bikeways

Accommodating bicycle riders serves both recreational needs and promotes cycling as a practical, cost-effective and environmentally sensitive means of transportation. Bicycle programs should focus on safety education for both motorists and cyclists, and providing secure, safe routes for bicycle travel. Bikeway routes should provide access from residential areas to major park and recreation areas, commercial centers and schools. Routes can be a combination of exclusive use paths and designated sections of roadways.

Aviation

The high quality and general availability of air travel to and from Nashville are distinct benefits for area residents. At the same time, the presence of a busy airport can present negative effects on the surrounding communities, if the surrounding land uses are not compatible with airport activities. Expansion of airport facilities

and/or operations should be planned for well in advance in order that negative impacts on the affected areas can be minimized. The participation of affected residents and their representative organizations should be sought. Activities which would not be greatly affected by the airport's presence, such as commercial and light industrial uses, should be encouraged to locate in the surrounding area. The program of mitigating the impact of airport generated noise should be continued.

GOALS AND OBJECTIVES

1. Provide for safe and convenient roadway travel.
 - * Promote the use of transportation demand management strategies, including staggered work hours, ridesharing, greater provision of flexible paratransit services, and balanced growth management.
 - * Enhance public transportation options by expanding the frequency, range and hours of service, with special emphasis on serving activity centers and downtown.
 - * Give priority to fulfilling the mass transit needs of low mobility populations by providing service to areas where these groups are concentrated, and ensuring that fares remain affordable.
2. Better accommodate pedestrian and bicycle travel, both for recreational and utilitarian purposes.
 - * Identify developed areas which require new sidewalk construction, and repair and maintain existing sidewalks.

- * Continue to require the provision of sidewalks in new residential development which is not of a low density.

3. Minimize the potential for disruption by planning well in advance for the expansion of airport facilities.

PRIMARY URBAN SERVICES

Definition

Primary public or urban services are the major public facility systems which enable a community to function at an urban level. Primary services are those systems which are considered essential, and are provided at an acceptable level in almost every settled location. These systems include water, wastewater management, police and fire protection, health care, education and transportation. Because of the scope of those topics, they are treated as separate community livability issues.

Service Districts

When Nashville and Davidson County adopted a Metropolitan form of government, two levels of public services and taxes were established. The General Services District (GSD) covers the entire county and provides a basic level of essential or primary services and some secondary ones. The Urban Services District (USD) overlays a part of the GSD. Within the USD, an additional

property tax is collected, and improved primary services such as increased fire protection, and additional secondary services such as street lighting are provided.

Water Utility System

The availability of a safe, potable supply of water in sufficient quantity to satisfy consumer demand and at adequate pressure for fire fighting needs is a primary prerequisite in the development of an urban community. The principal source of water in Davidson County is the Cumberland River. In order to protect this water source, programs should be continued to prevent contamination and ensure high water quality. The water-related needs of fire protection are adequate pressure, as determined by the capacity of water lines, and a sufficient number of fire

hydrants. Water pressure and fire hydrants should be considered an essential service, required in all existing and future developments, regardless of the utility providing the service.

Several utility districts and companies are currently responsible for providing water within Nashville. To facilitate more coordinated, efficient planning and service delivery, the long range policy of consolidating these districts into a single Metropolitan system should be continued.

Wastewater Disposal System

Planning for wastewater treatment for the Nashville area is done more formally than planning for water supplies. This difference reflects the fact that the Nashville area generally has water available over and above foreseeable

Omohundro Water Treatment Plant



demands. The concern, then, has been to protect the quality of that water by ensuring adequate collection and treatment of wastewater. The overall plans for wastewater treatment and collection for the Nashville region are the Nashville Area 201 Facilities Plan and the Area-wide Waste Treatment Management Plan, developed under Sections 201 and 208, respectively, of the Water Pollution Control Act of 1972. Both of those plans provide that Metro would ultimately be the wastewater treatment agency for the entire Nashville region, and that all wastes from the independent jurisdictions would be transported to Metropolitan facilities for treatment. As with the area's water system, it is recommended that the long-range policy of consolidating the authority for the provision of wastewater services under one sewerage service agency be continued.

Sanitary wastewater disposal service is provided by two major types of systems. One is a public sewerage system which includes collection, transport and treatment facilities. The other consists of private, on-site treatment and disposal facilities. Because of greater development flexibility and relatively lower capital cost of installing septic tanks, many older residential areas were developed in this manner. In recognition of the health and water pollution problems associated with the widespread use of septic tanks in urban areas, the Metropolitan Government should continue the policy of requiring public sanitary sewers in areas recommended

for urban development. The growth forecasts articulated in the subarea plans should be used to project future wastewater treatment and collection needs.

The provision of public wastewater treatment services is often the most important factor in allowing development of an urban character to take place in the Nashville area. Public sewerage service allows the density required for large scale urban development. Providing public sewers then, generally leads to increased demand for schools, parks, roads, fire and police protections and other urban services. Thus sewer provision should be carefully considered in light of the availability of other services.

Storm Drainage System

The storm drainage system for Nashville is formed by natural waterways combined with a variety of man-made improvements. Improvements designed to carry stormwater range from open ditches to major underground storm sewers and temporary stormwater detention facilities. Traditionally, the primary function of the storm drainage system has been to provide efficient drainage which minimizes the impacts of stormwater run-off on the lives and property of Nashvillians. Effective management of stormwater run-off also significantly affects water quality. Future development and maintenance of storm drainage systems in Davidson County

should continue to focus on both water quality and safety issues.

There are currently several challenges to effective stormwater management in Davidson County. Man-made stormwater controls are much less prevalent outside of the USD. Because of the varied topography in the county, certain areas, many of them outside the USD, are much more sensitive to run-off than others. There has been a long standing need for drainage basin studies in such areas. Currently, review and implementation occur on a case by case basis, implementing controls within or associated with development and road projects. What is needed is an overall strategy for managing stormwater on a county-wide basis. Because the stormwater management needs vary with the terrain, special needs and problems should be identified in the sub-area planning process.

The presence of combined storm and sanitary sewers in some of the older areas of the county draws special attention to the need for effective stormwater controls. After periods of heavy rainfall, stormwater run-off drains into the combined sewers, increasing the flow beyond capacity. The end result is that raw or partially treated sewage may flow directly into the Cumberland system. This problem should be addressed through a combination of stormwater controls and the separation of sewer lines where feasible.

Police Protection

The immediate purpose in the provision of public safety is that an adequate response to a threatening situation be made within a relatively short period of time. The broader goal is to take all reasonable measures to prevent or minimize the occurrence of those situations.

Because police protection is a GSD service, it is provided at acceptable levels throughout the county. Standard police protection is supplemented through the provision or support of special programs such as the downtown walking patrol, the School Mothers Patrol and other community cooperation efforts. These programs make substantive, steady efforts to reduce the occurrence of emergency situations, and should continue to be supported. The addition of more personnel, cars and sector headquarters should be undertaken as is deemed necessary to improve response time.

Fire and Ambulance Service

In addition to fire suppression, the fire department is also the source of primary response to personal injury or serious illness. To supplement the ambulances and their crews, the fire department has trained some firefighters as emergency medical technicians. Unlike police protection, the range of fire suppression and emergency medical services is markedly different between the two areas. The additional revenues collected by the USD allow the fire department to locate fire halls much closer

together and to support additional personnel. As a result, fire apparatus can usually reach a fire or other emergency in the USD within a fairly short response time. Because there are fewer fire halls in the remainder of the GSD, fire apparatuses generally have a longer response time. This discrepancy results in a greater threat to the safety of residents and property outside the USD, as well as higher insurance levels. Means should be sought to bring the level of fire service up to acceptable levels throughout the county. The possibility of eliminating the two different service levels should continue to be investigated. Needed upgrades in fire suppression service should be identified for each community.

GOALS AND OBJECTIVES

1. Provide safe, potable water in sufficient quantity to satisfy consumer demand and meet the needs of fire suppression.

- * Facilitate more coordinated, efficient planning and service delivery among water and sewerage districts.
- * Protect the health of residents and water quality through the safe, efficient treatment and collection of wastewater.
- * Ensure that water lines are large enough to provide adequate pressure for fire fighting, and that a suitable number of fire hydrants is present in all developed areas.

- * Follow the water quality and facility guidelines set forth in the 201 and 208 Plans and update these plans as necessary to reflect changing conditions.

- * Minimize, and eventually eliminate, the amount of sewage which bypasses treatment facilities due to inadequate capacity.

2. Use effective stormwater management to protect the population, property and natural features of Nashville.

- * Develop comprehensive, county-wide stormwater management plans.

- * Explore the potential and implementation of a stormwater management utility.

3. Provide adequate response to emergency situations, and take all reasonable measures to prevent or minimize their occurrence.

- * Continue to support the provision of special programs which supplement police protection.

- * Explore methods of making fire suppression service levels consistent throughout the county.

- * Identify gaps in emergency services and develop plans for their correction.

4. Coordinate the provision of essential services with development.

- * Ensure that needed projects are programmed in the Capital Improvement Budget and Program.

- * Develop a functional plan for the timing of infrastructure and new development, emphasizing cost/benefit analysis.



BUSINESS ENVIRONMENT

- Education
- Arts and Culture
- Transportation

A healthy and stable business environment is essential to any city's quality of life. An attractive natural setting and pleasant neighborhoods cannot draw many residents if there are few employment opportunities. Revenue generated by businesses is critical to the government's ability to provide services. Beyond providing jobs and revenue, the business community generally takes an active role in contributing to Nashville's quality of life in a variety of ways. The general availability of a variety of goods and services is important to much of the region's population. Many businesses and business groups sponsor education, arts and recreation programs. Business leaders are often people who possess the skills and resources to provide community leadership by working with neighborhood, government and civic organizations.

The business community as a whole is an integral part of Nashville, without which the city could not function. It is

important to recognize the contributions businesses make to the city's quality of life. Government's traditional role has been to protect property owners while facilitating, or at least not restricting, trade and commerce. While this role has evolved somewhat, it is still true, especially at the local level, that government has more power to affect residential issues than commercial concerns. The relationship of business to government must therefore be more of a partnership, relying on communication and cooperation to work toward common goals. These goals include:

- Producing a skilled, high quality workforce which can meet the needs of employers
- Providing more jobs and revenue through the continued expansion of business and industry
- Retaining existing businesses

- Creating attractive, pleasant commercial areas
- Providing a variety of cultural and recreational opportunities

Enhancing and improving the business environment is not the same as concentrating on economic development, although the two are interrelated. Economic development focuses primarily on seeking new or relocating businesses, while the business environment refers to how Nashville businesses function as part of the city. As with the residential and natural environments, a good business environment provides a potent marketing tool for attracting economic development.

EDUCATION

Quality of Public Education

One essential ingredient of a viable business environment is the availability of an educated, trained workforce. School curricula that will meet the needs of all students will meet the needs of present and future employers. To prepare for the job market, students must have a solid foundation of reading, math and communication skills.

To ensure that a steady supply of able workers is present, it is in the best inter-

est of the business community to involve itself with educational issues. There are any number of ways for businesses to participate in improving the quality of public education. Options include donating equipment or employee time, setting up internship and cooperative education programs, support of athletic programs, working with schools to create supplementary classes in specialized areas, and participating in mentor and visitation programs. The business community is strongly encouraged to take an active role in enhancing the quality of the education system.



Job Training

In a changing job market, it is essential that workers be able to adapt to rapidly evolving career opportunities. Even highly trained workers may face the challenge of maintaining viable skills, as the requirements of business and industry continue to change. Government and business alike must recognize that disparities between the needs of employers and the skills available in the labor force tear at the foundation of a healthy business environment. Human resource development is carried

out by many different organizations and governmental agencies, generally at the state and federal levels. However, Metro must continue to support these efforts through coordination and advocacy. Business groups can greatly enhance these efforts through their active participation.

Adult and continuing education programs provided by public and private institutions of higher learning are important in updating worker skills. Collaborative efforts among public and private post-secondary institutions to continuously evaluate employment trends would facilitate coordination of education and employment needs. The expansion of evening/weekend degree programs would allow more working people to update their skills and keep pace with the demands of the job market. It is important to coordinate public transportation with institutions of higher education so that these opportunities are accessible to as much of the community as possible.

Technology and Information Transfers

Colleges and universities are more than employers and producers of skilled workers; they are also important sources of new information and technology. The results of academic research are often useful to business and industry. Efforts should be made to strengthen the flow of information between the academic and business communities. Such efforts may



lead to an increase in collaborative research, whereby university research teams, buildings, and equipment are made available for privately funded research. Businesses may also work with researchers to set up incubators to market new technology and products.

Library Service

The Nashville Public Library system should continue its strong commitment to providing for the needs of business. Businesses are encouraged to work with the library's development staff in providing these services, both in terms of defining demand for different services and providing financial support.

GOALS AND OBJECTIVES

1. Reinforce the interdependence of education and employers.

* Ensure that students are adequately prepared to meet the demands of the job market.

- * Encourage the business community to take an active role in promoting quality education.

2. Encourage institutions of higher learning to coordinate education programs with employment opportunities.

- * Encourage post-secondary institutions to collaborate their efforts to monitor community and employment trends.
- * Increase and strengthen partnerships between researchers and private businesses and industries.
- * Coordinate public transportation with adult educational opportunities.

3. Continue to provide quality business information services through the public library system.

- * Facilitate dialogue between the library staff and users of business information services so those services can respond to changing demands in a timely fashion.
- * Encourage users of business information services to contribute resources to the library.

ARTS AND CULTURE

Sponsorship of the Arts

Lively and diverse cultural activity is an integral part of the city's economic vitality and a basic ingredient of its identity. The music industry is an integral part of the city's economy, both directly and in the form of the tourism it attracts.

Music has earned Nashville national name recognition which no amount of public relations money can buy. Nashville also has an important role as the region's major center for a wide range of visual and performing arts. The city's business and arts communities can greatly benefit one another. A strong local arts scene helps to attract tourists, conventioners, and even residents, all of whom are likely to patronize local businesses. Individual and corporate contributions greatly expand the range of artistic and cultural options available to the public. Large scale, high-profile events and festivals are seldom possible without corporate sponsorship. In turn, these events provide sponsors with cost-effective advertising and positive community relations. Commercial structures themselves can provide gallery space. The arts and business communities are encouraged to work together to further their common goals.

Many of Nashville's historic structures are in commercial areas or contain commercial uses. The central business district has a particularly strong concentration of historic commercial structures which contribute to its charm and distinctiveness. These structures should be preserved and, if necessary, restored. Historic preservation policies should be flexible enough to allow the structures to be economically functional. New commercial development in areas where historic structures are present should be

encouraged to be visually and functionally compatible with the existing structures.

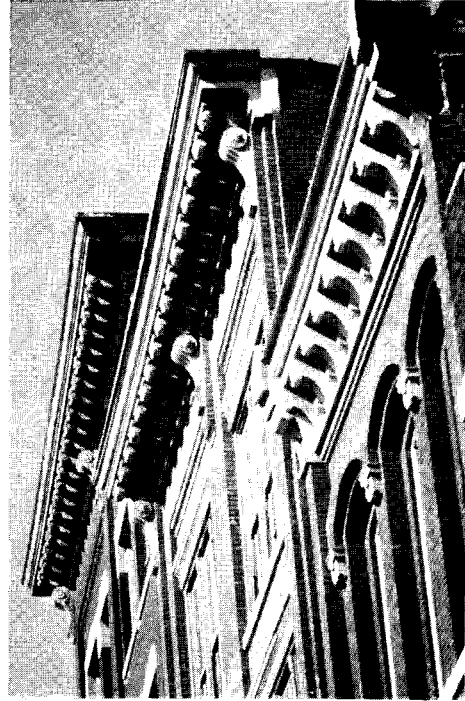
Visual Image

The visual image of commercial areas is important, not only in that it provides an attractive working environment, but because people tend to form an impression of a city based on the appearance of its business districts. The visual image of downtown has the potential to make a profound impact on visitors and residents alike. While architectural preferences are highly subjective, there are certain design elements which are generally agreed upon as positive. For instance, foliage and green space are usually appreciated in commercial areas. Even small landscaped green spaces can provide leisure areas for workers and visitors, as well as providing visual relief from the urban environment. Street trees are useful for sheltering pedestrians from the sun and wind, as well as being decorative. Public and private entities should be encouraged to incorporate these elements in commercial areas.

GOALS AND OBJECTIVES

1. Encourage private sector involvement in the arts.

- * Generate more interest in tourism through the promotion of special events and festivals.



Second Avenue Retail District

- * Facilitate corporate sponsorship of the arts.

2. Encourage greater consideration of aesthetics and historical preservation in commercial development.

- * Recognize commercial developments which promote a positive visual image for the city.
- * Encourage commercial developers to coordinate with the Nashville Historical Commission to preserve and enhance historically significant structures.

3. Create a positive visual image in commercial areas.

TRANSPORTATION

Demand Management

The commuter stream generally places the greatest single demand on the road network. Any attempt to effectively manage automobile usage must concentrate primarily on commuters. Employers can be instrumental in changing attitudes and perceptions about commuting. Allowing for flexible or staggered working hours is one example of an effective strategy for reducing peak hour congestion. Company-sponsored car and vanpools are another strategy. Businesses are strongly encouraged to participate in demand management programs such as these.

Mass Transit

The support and participation of the business community is essential to achieving increased mass transit ridership. Among other incentives, employers can offer bus passes to workers as an alternative to subsidizing parking. Increased mass transit ridership greatly benefits the community in terms of improved air quality, reduced roadway congestion, and minimized expenditure for infrastructure. The individual benefits to users of mass transit include lower gasoline and parking costs.

Providers of mass transit should continue to recognize the importance of businesses in making mass transit work;

frequent user discounts and longer hours of operation to accommodate flexible working hours, among other policies and programs, could help to make mass transit a more feasible option for a larger number of workers. Public transportation should service commuter routes to and among employment centers and the airport.

Aviation

The Nashville International Airport has had a tremendous positive impact on the city's business environment. The presence of the American Airlines hub provides flights to more destinations than one would normally expect from a city of Nashville's size. The airport's ability to handle large numbers of flights efficiently is invaluable to those whose occupations require even infrequent air travel. Not only passengers benefit from the airport; the opportunity for convenient air freight is an advantage for many businesses. Continued, carefully planned expansion of the Nashville International Airport should be supported. Areas of possible expansion include equipping the airport for inter-continental air travel, expanding opportunities for air cargo, and increasing the number of flights and destinations.

As the international airport expands, the John C. Tune Airport will have an opportunity to play a larger role in general aviation. This type of service is a valuable resource for business travelers

looking for a more efficient alternative to surface transportation.

Commodity Movement

Nearly every Nashville business depends to some degree on the ability of goods and merchandise to flow easily in and out of the city. Nashville's geography and infrastructure provide excellent means for efficient commodity movement. The extensive air, rail, river and highway transportation networks should be viewed as integral parts of the city's positive business environment. The expansion of any of these facilities should be planned for well in advance to ensure that adequate space is available, and that adverse impacts on existing development can be mitigated or eliminated. Efforts should be made to plan for integrated freight systems, such as centralized freight terminal complexes serving rail and truck traffic.

Barge facilities will require careful planning, as commodity movement is only one of a number of competing uses along the Cumberland River. Active river transport should continue to be supported, although it is important that this use be reconciled with the use of the river for recreational and aesthetic purposes. It is recommended that a comprehensive plan for the Cumberland River be created and periodically updated.

Included in commodity movement is the transport of hazardous materials. It is

necessary that plans for the routing of these materials, as well as emergency containment, notification and evacuation plans be in place at all times.

GOALS AND OBJECTIVES

1. Reduce traffic congestion associated with commuting to the work place.

- * Encourage businesses to participate in demand management programs such as car-pooling and staggered work hours.
- * Coordinate mass transit services with the needs of workers and employees.

2. Promote Nashville's aviation facilities.

- * Support the expansion of Nashville International Airport's facilities and services.
- * Encourage a higher profile for the John C. Tune Airport.

3. Encourage safe and efficient commodity movement.

- * Plan for integrated freight systems, such as centralized freight terminal complexes serving rail and truck traffic.
- * Plan well in advance for the expansion of shipping facilities in order to minimize potentially negative impacts.
- * Create a comprehensive plan for the Cumberland River to accommodate competing uses, including barge traffic and recreation.
- * Ensure that comprehensive plans for the transport and handling of hazardous materials are in place.



NATURAL ENVIRONMENT

- Floodplains and Stormwater Management
- Landscape Hazards
- Water Quality
- Air Quality
- Solid Waste Management
- Vegetation

Nashville has an interesting and livable natural environment that contributes greatly to the distinctiveness and character of the urban area. The many tree-covered hills, extensive stream corridors and lakes provide an attractive, varied residential setting enhanced by important recreational amenities. Sensitivity to the environmental benefits and limitations of the county's land, air and water resources is vital to its future. The challenge is to ensure that growth necessary for economic vitality takes place in a way which minimizes negative impacts on the natural environment.

The planning process should reflect an overall awareness that latitude to protect these resources is diminishing with increasing urbanization. Active management to integrate the urban with the natural fabric should be pursued at every opportunity. Major environmental considerations in this process should include:

- Particular care to conserve the landscape features which are in many ways unique in a large urban area. This should involve creative management of the natural open space/scenic potential of floodplains, hills, and other sensitive natural features.
- Assurance of clean air through policies which stress less-impactive economic development and reduce automotive congestion consistent with the limitations of Nashville's physical environment.
- Continuing vigilance in protecting the area's water resources both in terms of domestic supply and as a significant recreational and scenic amenity.
- Management of wastewater, stormwater and solid waste should be addressed in a comprehensive, environmentally sen-

sitive manner. Efforts should include the improvement of existing facilities as well as the careful establishment of new services. Coordinating the timing and scale of new development with service capacity is integral to achieving these objectives.

FLOODPLAINS AND STORMWATER MANAGEMENT

Definition

Floodplains are areas susceptible to flooding by the overflow of a water body, no matter how seldom. Generally "floodplain" refers to the 100-year floodplain, defined as areas that have at least a one in one hundred chance of being inundated in any one year. Floodplains are delineated on Federal Emergency Management Agency maps, but may be supplemented by other reliable, up-to-date sources, if available. Within the 100-year floodplain, two zones are defined: the regulatory floodway and the floodway fringe. The floodway is the lowest part of the floodplain where the deepest and most frequent floodflows are conducted. The floodway fringe is that area on the margin of the floodway which is only lightly inundated by flooding.

Development In Floodplains

Floodplains appear to be prime lands for development because they are generally flat and above normal water levels. The risk of periodic flooding, however, poses a constant threat to development. At the same time, development can increase the frequency and intensity of flooding. Buildings, levees and earthfill can obstruct the flow of stormwater, causing backflooding and higher than normal flood peaks upstream. Development on floodplains and/or in the watersheds of streams above them can also increase the magnitude and frequency of floods and the size of the area inundated.

Stormwater

The management of stormwater is directly tied to the incidence of flooding. After a rainfall, water must either be absorbed into the ground (percolation) or flow into waterways (run-off). Structures associated with urbanization such as streets and rooftops are impervious; that is, they deter percolation and increase the rate and amount of run-off. Vegetation and natural drainage features which encourage percolation and slow the velocity of run-off are often obstructed or removed by construction. Some natural features which are present in Nashville such as steep slopes and inabsorbant soil types also increase the amount of run-off.

It is critical to control stormwater run-off through natural and on-site methods.

The preservation of vegetation and other natural drainage features associated with undeveloped land is perhaps the most cost-effective form of stormwater management, in addition to its aesthetic contributions to the landscape.

Conservation and Management

Floodplains require careful management in order to prevent damage that results from overflow and to preserve their value as scenic resources. Conserved and enhanced floodplains can provide significant areas of open space and serve as buffers between incompatible land uses. In addition, floodplains perform certain invaluable ecological functions which cannot be artificially duplicated. Floodplain areas provide the most productive and critical habitat for a variety of wildlife and plant species. A comprehensive floodplain management plan, in conjunction with a county-wide open space plan should pinpoint the areas of the floodplain which should be reserved for future recreational and/or wildlife conservation uses.

Cumberland River and Tributaries

The flows of the Cumberland River and its main tributary, the Stones River, are largely controlled by the U.S. Army Corps of Engineers' dams. As such, fill operations would have little real effect on flood elevation. On the other hand, the flow of the smaller tributaries of the Cumberland is largely a direct conse-



Residential areas can be devastated by flooding

quence of rainfall. Heavy, sudden rains of sufficient duration tax the carrying capacity of the streams. Channel modifications (channelization) which increase the capacity of the stream by clearing vegetation, paving and widening or deepening are often suggested to decrease flood hazards. However, channelization may increase the impact of flooding downstream, is quite costly, severely reduces the scenic value of the streams, and can have detrimental effects on water quality.

The recommended approach to flood control along the tributaries involves a combination of measures designed to conserve and enhance the natural characteristics of floodplain areas and to minimize damages due to flooding. These measures include controlling floodplain development, encouraging on-site run-off management, and preparing drainage studies for each tributary. The tributaries of the Cumberland also provide unique opportunities for diversified recreational activities within areas of conventional urban development. Along these waterways,

corridors of natural environmental and/or recreational interest should be protected.

GOALS AND OBJECTIVES

1. No construction should be permitted in floodplains which will, on its own or in conjunction with other developments, increase the degree of flooding.

- * Floodplain zoning should be designed and enforced to prohibit development that alters the flow characteristics of a stream.
- * Filling and excavation in the floodplain of tributaries should be discouraged and allowed only after careful review of the alternatives.
- * The consequences of future urbanization in each watershed on flood potential should form the basis for land use decisions along each of the streams. It is important to examine the cumulative impact of development in addition to the incremental effect of each project. Detailed drainage studies should be kept current for each watershed to assist in making the appropriate land use decisions.
- * Plans that call for filling in areas of the floodplain, drainage control, or channelization should protect properties that may be adversely affected by altered patterns of surface drainage.
- * Floodplains should be conserved as open space where they can be integrated into a greenbelt, recreation, flood control or stormwater management system. Areas within the floodplain should be considered for use as a greenbelt system.

2. Approach stormwater management in a comprehensive fashion, stressing "soft" strategies.

- * On-site stormwater management such as diversion terraces, detention dams, dry wells, and pervious surfacing should be encouraged to retard the velocity and volume of run-off.
- * Ensure that the pre-development run-off discharge rate of any site is not increased as a result of development whenever a change would contribute to a probable flooding problem.
- * Protect mature vegetation, especially along stream banks, from indiscriminate removal in order to enhance the aesthetic value of the landscape as well as to control erosion.
- * Meet or exceed federal standards for stormwater discharge quality.
- * Preserve natural overland flow systems.
- * Avoid modifications to system and water-course flow efficiencies.

LANDSCAPE HAZARDS

Definition

Although development must always respect the natural environment, some landscape features are much more limited in the types of activities they can or should support. In Nashville, these features include steep slopes, unstable soils and unstable geologic formations. An area where one or more of these fea-



Rolling, forested hills characterize much of Nashville's natural landscape

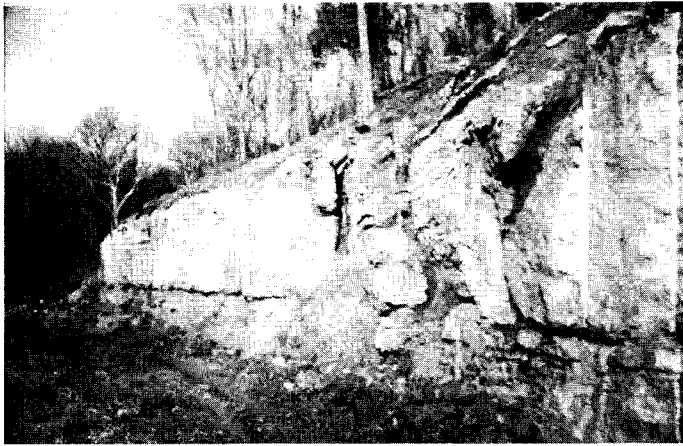
tures are present is referred to as "rugged terrain."

Slopes

One of the most distinctive and attractive features of the Nashville area is the hilly terrain. However, steep slopes, generally defined as those with a grade over 20%, pose particular safety hazards if improperly developed. Stresses created by hillside structures can cause slope failure, resulting in mudflows, slides and soil creep. To avoid these hazards and to preserve the scenic value of steep slopes, development should be directed away from the slope itself, although it may be allowed on ridgetops. The excavation of slopes needs careful

regulation to minimize the exposure of raw land to weathering and to prevent erosion.

Particular attention should be given to the conservation of vegetation on hillsides. Once removed, vegetation is very difficult to reinstate due to erosion of the soil mantle. Devegetated slopes contribute to flood problems by increasing rates of run-off and siltation of stream channels. Additionally, the excessive road grades often encountered in providing access to hillside developments require extraordinary construction methods, present maintenance problems and create potential hazards for their users.



Improper development on sensitive sites can result in soil creep or landslides

Soils

Development problems posed by soils in Davidson County are primarily related to instability and poor drainage. Subsurface drainage reduces the ability of unstable soils, such as Bodine-Sulfura and Dellrose, to bear loads. Some soils react to toe-cuts that disturb the soil's angle of repose and result in landslides and soil slump, often at considerable threat to structures built upon them.

While few areas of Davidson County experience standing water for long periods of time, instances do occur where poor soil drainage and percolation create health hazards. The ineffective percolation rates of many soils limit septic tank development on otherwise attractive sites. Some foundation and road instability problems could be avoided if development were not placed on very wet soils.

Geologic Formations

Two geologic formations in Davidson County pose substantial problems to development: Fort Payne Limestone and Chattanooga Shale. The Shale can generally be found beneath the Limestone beds, but areas where even one of these formations exists are generally unsuitable for intensive development. Road grades cut in the Fort Payne or Chattanooga are frequently subject to rock falls and slides. The crumbly nature of these formations limits their ability to accommodate structural development. Additional problems are caused by rainfall run-off on slopes and by lateral water movement between the limestone and the shale resulting in slippage.

Compatible Development

The character of land possessing one or more of these hazardous features may limit development densities or intensity. In general, higher intensity uses are discouraged due to potential dangers to structures and because of the increased cost of providing a full complement of urban services to these areas. In most cases, high intensity development would conflict with the sensitivity of the area and result in either environmental degradation or require excessive expenditures to protect the environmental features adversely affected by conventional development standards and practices.

In general, rugged terrain should be limited to low intensity development or conserved as open space. Aside from being aesthetically pleasing and providing recreational opportunities, open space is valuable as a land separator or buffer between differing land uses. More intensive development in sensitive areas should be considered only when it can be adequately demonstrated that no other viable alternative site exists. Great care must be taken in these instances to ensure that the land is developed in a manner which is safe for the structure itself, and for surrounding structures.

GOALS AND OBJECTIVES

1. Development on rugged terrain should be strictly controlled. Only compatible development should take place in environmentally fragile areas. Efforts should be made to minimize adverse environmental impacts during and after construction.

* Formulate criteria for development on rugged terrain considering:

- the adequate provision of urban services
- acceptable densities
- possible adverse impacts on nearby development
- alternative development forms such as clustering
- the number of available alternate sites
- any long term environmental impacts

* Facilitate creative development approaches such as clustering or transfer of development rights which will conserve notable landscape features and ensure structural soundness.

2. Rugged terrain should be conserved as open space if development would cause soil and/or water degradation or, where the terrain possesses special scenic or recreational value.

* Identify areas suitable for conservation as open space based on their development potential and aesthetic qualities, and work toward securing or preserving them for public use.

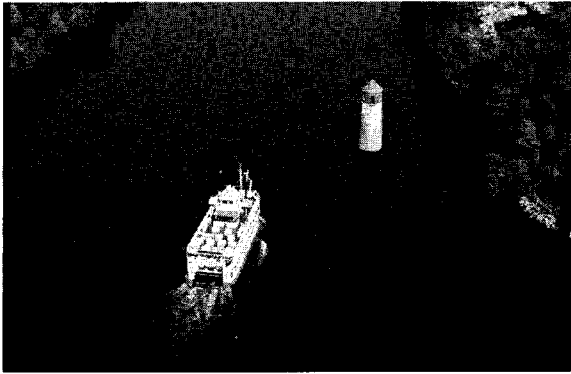
WATER QUALITY

Surface Water

The main source of water for Davidson County is the Cumberland River. Within the county, its flow and level is controlled by two dams. The dams have also created two reservoirs used for navigation, energy, flood control and recreation. While all waterways are affected by urbanization, the reservoirs are particularly sensitive. The rate of siltation, which determines the useful life of a reservoir, can change sharply as a result of land management practices in the surrounding watershed. The reservation of land around J. Percy Priest Reservoir has reduced the siltation rate, but such precautions were not taken at the time Old Hickory Reservoir was developed.

Groundwater

While groundwater is not used for Nashville's drinking water supply, it indirectly affects surface waters, which are



the county's main water source. Groundwater is a uniquely fragile resource in that it is not exposed to natural purification systems which recycle and cleanse surface water. As such, special attention should be given to protecting groundwater quality. Major threats to groundwater include the presence of sinkholes, the use of septic tanks in areas with unsuitable terrain and the unsound disposal of industrial wastes and process water.

Pollution Sources

Most sources of water pollution are one of two types: point and non-point. Point sources are characterized by concentrated outfalls from high-intensity land uses. Most examples fall under the general headings of industrial process water and municipal sewage. The lack of a separate stormwater sewer system in some older sections of Nashville poses a threat to water quality in that during periods of heavy rainfall, bypass may flow directly into waterways. Point source pollution can be minimized in two ways: by directing growth so that the sewer system's carrying capacity is

not exceeded, and by considering potential threats to water quality when siting industrial uses.

Non-point sources are spatially diffused, emanating from relatively large areas and entering waterways via overland flow and groundwater exchange. The prime contributors include development drainage and agricultural run-off. This type of pollution should be approached as a land management problem, focusing on the sites, activities and conditions that produce the pollutants. Non-point sources should be addressed through proper stormwater management, concentrating on "soft" approaches such as proper site selection, minimizing impervious surfaces and retaining vegetation and other natural drainage systems, rather than mechanical and engineering "hard" solutions. Soft solutions are preferable because they tend to be more effective, less disruptive and more cost effective than hard solutions.

Agricultural run-off requires a regional approach, as little farming activity actually takes place within Davidson County. The westward flow of the Cumberland carries agricultural pollution into Nashville from rural areas to the east.

Quality Standards

Regulations regarding water quality are set by federal and state agencies. Under the guidance of the Environmen-

tal Protection Agency, the Greater Nashville Regional Council reviews and develops regional quality standards in the 208 Water Quality Plan. Nashville's first priority should be to continue meeting these standards.

Water may meet specified potability standards and still retain an unpleasant taste and/or odor. This is largely a consequence of agricultural run-off which contains nutrients and phosphates that encourage the rapid growth of algae and bacteria. Even low levels of certain types of pollutants can drastically alter the balance of aquatic life resulting in the elimination of fish species or shift to rougher types such as carp, thereby reducing recreational opportunities.

GOALS AND OBJECTIVES

1. Maintain and improve the quality of water in Davidson County through the proper management of point and non-point pollution sources.

- * Meet or exceed federal and state standards for potable and discharge water.
- * Protect groundwater by restricting the use of septic tanks to appropriate land formations and soil types.
- * Concentrate on "soft" approaches to stormwater management.
- * Work with other regional jurisdictions to minimize the amount of agricultural pollution reaching Davidson County.

2. Discourage development which will have unacceptable effects on water quality.

* Strictly control the location of activities which adversely affect the quality of the water supply and/or are incompatible with the recreational function and scenic qualities of the waterways.

* Coordinate development plans with the appropriate Metropolitan Government agencies to ensure that adequate sewer capacity is available.

AIR QUALITY

Pollution Sources

Most air pollution comes from either mobile or stationary sources. Mobile sources are mainly automobiles and other vehicles with internal combustion engines, while stationary sources include industrial, manufacturing and chemical processes.

Dispersal

Atmospheric and climatic conditions in Nashville tend to hamper the natural scattering of pollutants. There are relatively frequent temperature inversions which prevent the mixing of air and dispersal of pollutants, particularly in the summer and fall. As a result of topographic features and general wind patterns, a zone with reduced windspeeds stretches from the southwest to the northeast through the central portion of the city. This area with the lowest natural potential for dispersal of air pol-

lutants coincides with the most highly developed portion of the urban area.

Standards

As with water quality, local air quality standards are determined by federal and state guidelines. The State Implementation Plan (SIP) outlines the state's program for achieving federally established air quality standards.

Reduction Strategies

Several approaches can be taken to reduce mobile source pollution. The most lasting strategy is reducing reliance on the automobile by encouraging alternate modes of transportation such as mass transit, pedestrian or bicycle travel. This is a slow process requiring substantial change in travel behavior. In the in-

terim, measures should be taken to ensure that each vehicle operates at peak efficiency and produces as little pollution as possible.

Stationary sources which are already in place may use mechanical and engineering-type solutions to minimize pollution-causing emissions. The economic benefits of new pollution generating activities should be weighed against the cost to the environment. The most suitable location for each new activity should be sought, considering the potential for pollution dispersal, incremental effects on established urban areas and established standards for each type of pollutant.

Regional Aspect

Airborne pollutants do not respect political boundaries; thus the air quality of Nashville is very much influenced by the surrounding area. Because Nashville is the major employment center for the region, the high volume of commuter traffic originating outside the county is a large contributor to mobile source pollution. The atmospheric conditions in the region tend to increase the amount of industrial pollution to be imported from the surrounding area. The improvement of air quality is ultimately dependent on regional solutions.



Auto emissions testing helps to preserve air quality

GOALS AND OBJECTIVES

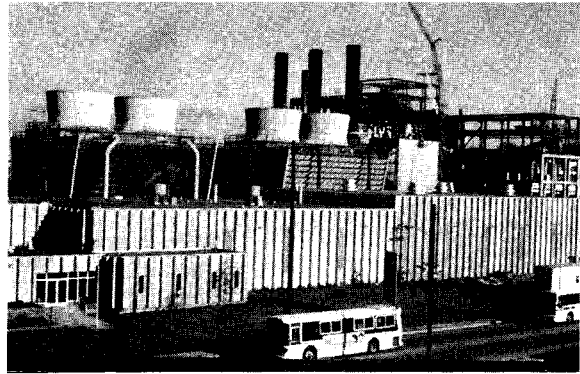
1. Continue to improve and protect the area's air quality.

- * Meet or exceed federal and state air quality standards.
- * Promote mass transit and other alternate modes of transportation which reduce reliance on the automobile.
- * Evaluate the location of new pollution generating activities on the basis of their potential for pollution dispersal, incremental effects on existing development and established air quality standards.
- * Develop a regional approach for the identification of reasonable air pollution control measures, evaluation of alternatives and implementation of air quality improvement strategies.
- * Study the effects of urban structure on travel patterns in an attempt to reduce the number of vehicle trips within Davidson County.

SOLID WASTE MANAGEMENT

Classification

Solid waste is defined as any type of garbage or refuse including solid, liquid, semisolid or contained gaseous material. This includes industrial, hazardous, medical and municipal waste, each of which requires different treatment. Most of these waste types are strictly regulated by federal agencies, but



Nashville Thermal Transfer Plant

several aspects of their collection, processing and disposal are local planning issues.

Waste Stream Reduction

Given the difficulties involved in waste disposal, it is advantageous to reduce the amount of materials that enter the waste stream. There are a variety of ways to limit the need for disposal, including recycling, source reduction, composting and energy reclamation. All of these methods should be elements of a comprehensive solid waste management program. In addition, the development of programs addressing the production and marketing aspects of recycling should be investigated.

Processing and Disposal

Once refuse has been collected, there are three main methods of preparing it for final disposal: incineration, compacting and composting. All three

methods are aimed at reducing the mass and volume of the waste: incineration through burning, compacting through compression, and composting through biodegradation.

Each processing method has its own advantages and drawbacks. For instance, the ashes resulting from incineration may pose threats to air and water quality, if not dealt with properly. Ultimately, the ash must be disposed of in a landfill. However, the heat generated by combustion can be recovered for beneficial uses such as the generation of steam, chilled water or electricity.

Compacted waste containing organic compounds is placed in a sanitary landfill, where fresh waste is covered with clean fill. Other waste, such as that resulting from construction and demolition activities, is buried in specially designated landfills or recycled. Landfill sites must be chosen carefully to avoid potential water contamination. The

topography, geology and development pattern of Davidson County make siting a landfill an extremely challenging proposition.

Compared with incineration and compacting, composting is a relatively new option for widespread use. In composting, refuse is sorted, and certain biodegradable materials such as leaves, grass clippings, and kitchen scraps are set aside in a humid spot. In time, the refuse is reduced to a mulch which can be used as fertilizer. Composting is very cost effective and environmentally sensitive, but is limited by the narrow range of refuse which it can process. It is an excellent method for disposing of yard wastes, which make up a large proportion of an average sanitary landfill's refuse by volume, but composting must be combined with other processing and disposal methods.

A comprehensive solid waste program should consider the advantages and disadvantages of all three types of processing and disposal and specify a program which is most beneficial to the population and the environment. Both short-term and long-term costs should be considered. The best available technology and methods should be used. It is also important to consider the regional aspects of solid waste management problems and solutions.



Locating Sanitary Landfills

Although there are several different types of landfills, sanitary landfills are the most difficult to locate. In Davidson County, sizable tracts of suitable land are scarce, as few areas of the county meet the physical requirements. Additionally, nearly everyone opposes the siting of a sanitary landfill near where he or she lives. Modern engineering and construction techniques have reduced the potential hazards to ground and surface water to a minimum, but landfills can still create many nuisances, such as heavy truck traffic and high levels of noise.

Because sanitary landfills are so difficult to locate, waste processing and disposal needs should be planned for far in advance, beyond the present planning period. The capacity of the landfill should be carefully monitored and appropriate action be taken to locate new waste disposal facilities well in advance of need. Once a landfill site is chosen, affected citizens should be involved in the landfill design, so that potentially adverse impacts can be mitigated.

GOALS AND OBJECTIVES

1. Reduce the amount of materials entering the waste stream.

- * Encourage citizens, businesses and industries to produce less solid waste through source reduction, composting, and recycling by actively publicizing and promoting these alternatives.

- * Analyze the feasibility of establishing a major resource reclamation system.
- * Implement a comprehensive solid waste management plan which will incorporate all feasible methods of reducing the waste stream.
- * Investigate means of expanding markets for recycled materials.

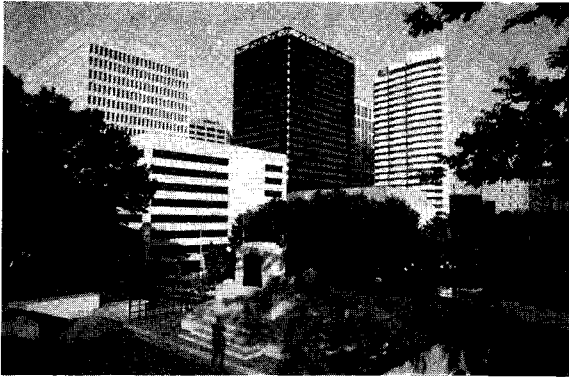
2. Reduce the adverse impacts of waste disposal sites on existing and future development.

- * Meet or exceed federal and state standards regarding solid waste processing and disposal.
- * Secure adequate area to meet metropolitan landfill needs through the next twenty years.
- * Investigate, evaluate and implement alternatives to landfill disposal, using the best available technology.
- * Identify and prepare future landfill or other disposal sites well in advance of anticipated need.
- * Explore the potential of regional cooperation in the development of a solid waste solution.

VEGETATION

Value of Vegetation

Retaining the vegetative cover is one of the most effective and least expensive means of controlling erosion, increasing percolation and reducing the amount of



Vegetation greatly enhances the appearance of developed areas such as downtown

stormwater run-off. The presence of vegetation is a key component of effective stormwater management. As an essential part of the city's aesthetic environment, vegetation contributes substantially to the community's quality of life, and therefore its economic development.

Aside from their obvious aesthetic qualities, trees growing along roadsides are effective sound buffers. They also serve as sensitive monitors of conditions and trends in parts of the landscape that are otherwise not apparent without the aid of detailed observation and measurement. The sickly appearance of trees near highways, for example, may be an indication of impaired drainage or heavy air pollution, thereby drawing attention to environmental impact problems which might otherwise be overlooked. They also help to prevent roadway flooding during periods of heavy rain.

Vegetation should be the preferred material for reducing glare and reflection, filtering sunlight and radiant heat and buffering noise and wind. Man-

made alternatives for achieving these ends are often more costly and disruptive.

Rare and Endangered Species

There exist several varieties of rare and endangered plant species in the Nashville area, the majority of which are found in the Cedar Glades around J. Percy Priest Reservoir. The Glades constitute a rare and precious resource which should be protected from the impacts of development.

Conservation and Protection

Nashville is fortunate in that many older developments included large lots and retained much of the original foliage. While most newer developments plan for landscaping, existing vegetation is not protected vigorously enough. Even if a site is fully replanted, it takes many years, if ever, for the new vegetation to evolve and provide the same benefits as the original growth. To ensure that the vegetative cover is sufficiently protected in developing areas, landscaping requirements should apply to all new commercial and residential development. Standards should be flexible enough to allow for variations in existing mature vegetation, erosion control needs, and the presence of unusual plant species. Native species should be preferred over invasive, exotic species.

The conservation of vegetation is equally important in undeveloped areas. Environmentally sensitive areas are especially in need of vegetative cover to protect against erosion and water quality degradation. Vegetative cover in open spaces, unused, or recreational land should be preserved in its natural state.

GOALS AND OBJECTIVES

1. Protect mature vegetation and require replanting in cases where existing vegetation is removed during construction.

- * Facilitate agreements between public agencies and private landowners regarding planting and maintenance of trees and other landscaping in small private areas.
- * Formulate landscaping standards for new development and redevelopment activities.

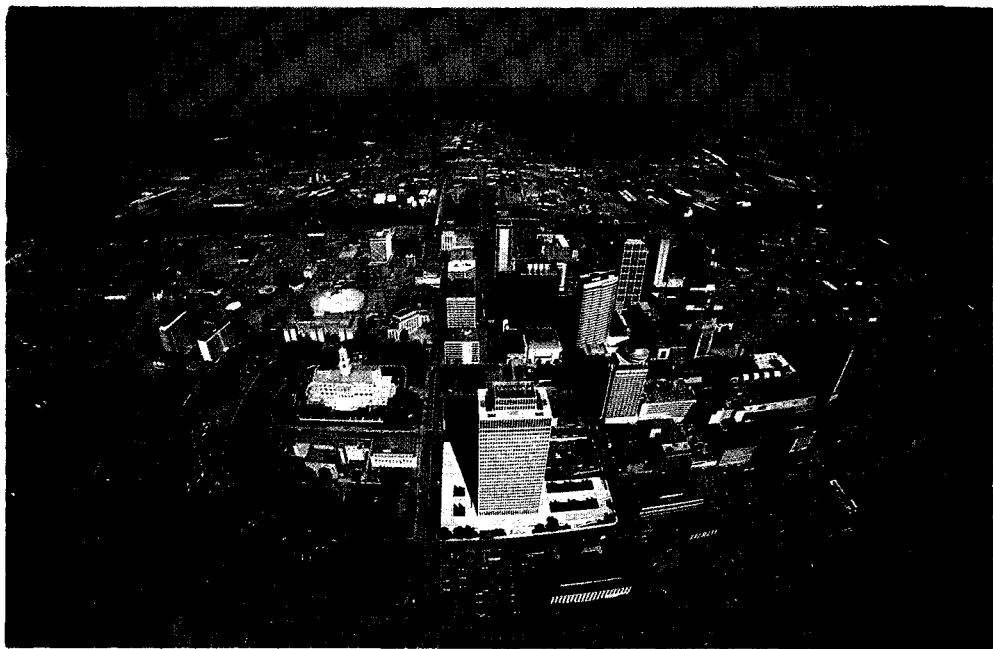
- * Stress the use of native species wherever possible.

2. Use vegetation as an alternative to man-made devices for buffering, insulation, erosion control and water quality protection.

- * Identify notable trees or desirable vegetation cover for various land use situations.
- * Design future roadways to incorporate appropriate landscaping to heighten the aesthetic and functional appeal both to motorists and surrounding residents.
- * Use trees along roadways as noise buffers.
- * Include ground cover requirements in stormwater management policies.
- * Use trees along waterways as flood control devices.

3. Protect rare and endangered plant and tree species.





URBAN STRUCTURE

- Central Business District
- Activity Centers
- Commercial Land Use
- Residential Land Use
- Industrial Land Use

The arrangement or pattern of the city's principal physical components influences how well it functions as a place to live and work, and as a provider of urban services. These physical components include residential, employment and retail areas, open spaces, and the transportation network. If these components could be arranged in an ideal pattern, service delivery costs, traffic congestion and land use conflicts would be minimized, while the community's needs would be provided for. However, as the city grows, its urban pattern tends to exert greater influence on essential functions and to require more attention to enhance efficiency.

Nashville's growth during the latter half of the twentieth century has involved broad decentralization of commercial and residential activities. In contrast, office and industrial employment areas have remained more centralized. The resulting pattern includes several major outlying shopping areas, a

dominant downtown office and employment concentration, and a range of smaller commercial and industrial locations distributed widely throughout the city. This pattern is heavily dependent on the community's system of radial arterial streets. The system of alternative access routes, including circumferential connecting roadways, is less well developed. The city has reached a size and level of diversity wherein it is experiencing problems associated with this pattern of development, most notably traffic congestion.

The urban structure of Nashville is similar to that of many other metropolitan areas, but its consolidated form of government creates unique planning challenges; within Davidson County there are not only urban issues, but suburban and rural development issues as well. In effect, Nashville is confronted with four different planning environments, each with its own separate concerns. Rural parts of the county that are

not expected to develop in the next twenty years require protection from untimely development. In predominately open areas which are beginning to develop, the provision of infrastructure and urban services, as well as the appropriateness of development, are major issues. In developed sections of the county, primary planning concerns include service delivery and development compatibility. Finally, bypassed and redevelopable tracts need to be integrated into the existing urban fabric at the proper level of intensity.

Planning must focus on creating a more efficient overall urban pattern which minimizes land use conflicts and traffic congestion while facilitating cost-effective urban service delivery. The planning process should reflect an awareness of Nashville's place within the larger metropolitan area. There is also a need to balance the demands of development with sensitivity to the quality of life. Planning for a more efficient urban structure should include:

- The organization of an urban structure which will lend itself to the widespread use of public transportation and other alternatives to single occupancy automobiles.
- Preservation and enhancement of the unique functions of downtown.

- Creation of several centers of commercial, industrial and residential activity, each with its own specialized functions.
- Facilitating an orderly pattern of residential growth at appropriate densities.

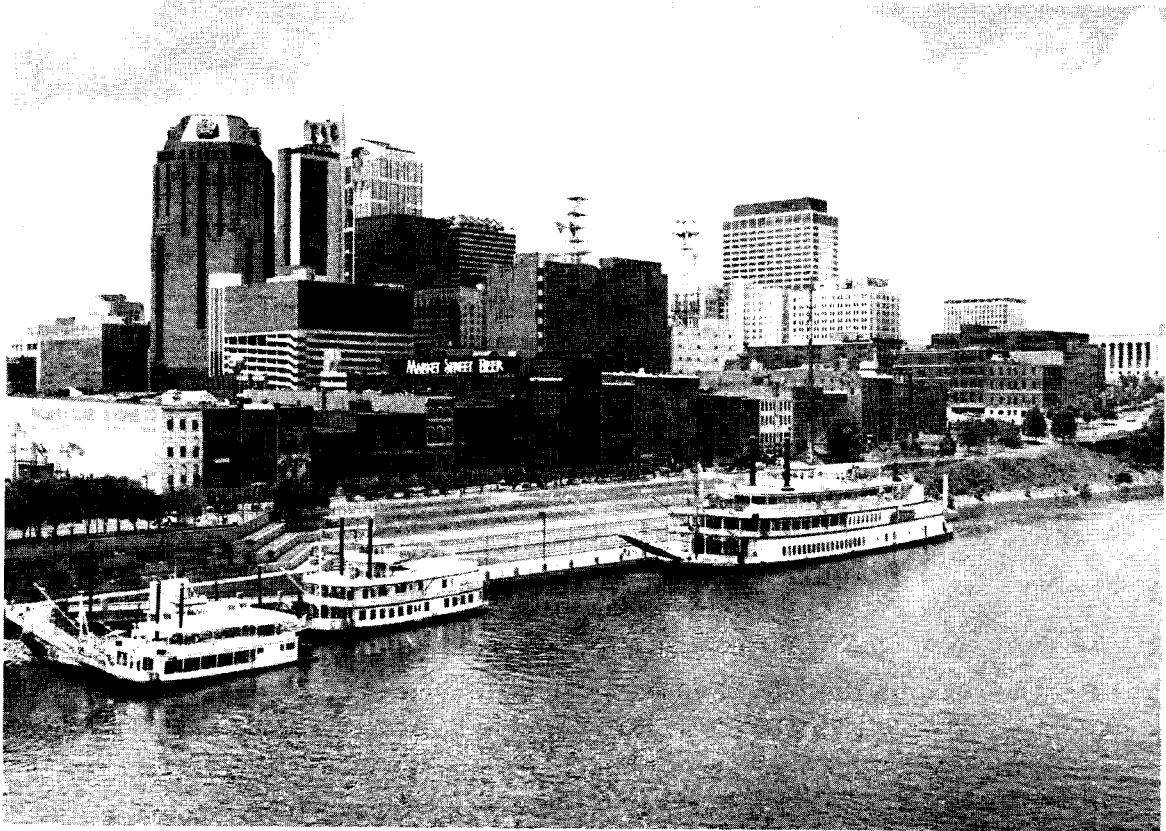
CENTRAL BUSINESS DISTRICT (CBD)

Definition

The central business district is the centrally located area where a variety of Nashville's commercial activities are concentrated, such as financial, service, retail, government, entertainment and office. It is distinguished from other commercial centers by the wider range of business activities, specialized office functions, multiple ownership of property, more intense development and the traditional grid street pattern.

Size and Components

The hallmark of any central business district is the relatively high intensity of development. Nashville's downtown is intensely developed but compact, a quality which contributes to its human scale. This compact development pattern creates walkable distances between most destinations within the CBD. At



the same time, the relatively small size raises long-term concerns about room for new growth. Although there appears to be quite a bit of room for infill development and greater intensification, there are actually several physical and psychological barriers to growth. Plans for the growth of downtown should carefully consider these restrictions.

Some land uses have been driven out of the downtown, in part because land costs are too high to allow a profitable rate of return. High density residential and community oriented retail are the most notable examples of functions which lack a powerful presence in the area, but which would enhance its economic viability. An additional con-

cern is the continued provision of mass transportation. Downtown is the obvious focus for mass transit, particularly a fixed guideway system. A stronger residential component would enhance the feasibility of such a system by providing more transit users.

Future Form

As the pressure for growth surpasses the supply of developable and redevelopable land in the currently delineated CBD, care must be taken to prevent a haphazard and inefficient form from emerging. Rather than downtown redevelopment occurring in a scattered, piecemeal fashion, it should be guided

by an overall plan. Areas appropriate for redevelopment and/or expansion should be identified and prioritized. Much of the redevelopment and reuse will be privately initiated and funded, but should be guided and assisted by the pertinent Metropolitan Government agencies. Public-private cooperation is essential to downtown redevelopment.



Church Street Centre

Accessibility/Parking

Regardless of the form downtown expansion ultimately takes, adequate accessibility must be assured. The widespread use of mass transit, especially light rail systems, would greatly improve access, allow more segments of the population to commute, and reduce the amount of land that must be devoted to parking space. With heavier reliance on public transportation, it will become more important to encourage pedestrian movement in the CBD.



Retail/Services

The downtown office concentration provides a captive audience of day-time workers. While few people are likely to shop for major appliances during their lunch hours, small ticket and impulse items such as clothing are well suited to the market. Restaurants, hair stylists, health clubs and other similar services are also appropriate. Without an after hours market, however, these establishments have limited hours of operation. If a greater evening and weekend population were established through an increase in downtown residences and/or visitors, retail and service establishments would be assured of greater profitability, and would likely increase in number.

A "24 Hour" Downtown

In order to attract people downtown during non-office hours, it is necessary to accommodate a wide range of activities. Although many festivals are held in the CBD area, they are occasional events. The best way to increase the amount of weekend and evening traffic in the CBD is to encourage permanent entertainment and residential structures. In working for a 24 hour downtown, the following elements should be considered:

Residential - Residential structures in the downtown area are likely to be high density, due to the relatively costly land in the area. Because of the high land costs in the CBD, more residential uses will be feasible at the fringes of the commercial core, although residential structures should be permitted within the core. To this end, residential uses should be encouraged in the adaptive reuse of older buildings, and in other mixed-use structures. An essential component of residential life is the presence of accessible community scale commercial facilities. In particular, grocery stores, drug stores and personal service facilities should be provided for in the downtown area as a stronger residential presence creates the market.

Sports/Entertainment/Cultural Facility - An arena or other multipurpose structure can have a positive impact on neighboring entertainment establishments, as well as enhance the positive image of downtown. Downtown is the ideal location for such functions because the

transportation infrastructure and parking facilities are already in place.

Tourism/Conventions - The tourism/trade show/convention industry plays a large part in Nashville's economy. As more leisure activities are available in the downtown area, it will become a more attractive locale for visitors. Conversely, a steady stream of visitors will make the entertainment functions more economically viable.

CBD Frame

The land within the CBD can be divided into the commercial core and the CBD "frame" around the core. Although not as compact nor as intensely developed as the commercial core, the frame is appropriate for a concentration of diverse commercial and residential activities. The frame is perhaps the best location for community scale commercial and residential functions, and satellite parking. This area may be characterized by clusters of related activities seeking the benefits derived from cumulative attraction, such as support services for downtown offices. In addition, residential development is appropriate in this area in order to provide housing opportunities in close proximity to the employment center. Because of the diverse range of activities, considerable attention should be focused upon methods of achieving compatible land use relationships in this area.

Image/Design

Making the CBD attractive to pedestrians is essential for promoting the use of mass transit and reducing the need for parking. While a diversity of activities is important to the appeal of downtown, cleanliness, safety and aesthetic concerns are also key components. Security measures can take many forms other than increased police protection, such as adequate street lighting and a steady volume of pedestrian traffic.

Downtown must be comfortable and interesting enough to convince a substantial number of workers to leave their cars at home, use public transportation and walk within the CBD. Therefore downtown should maintain a human scale and be conducive to pedestrian mobility. Because Nashville's downtown evolved before the advent of widespread automobile traffic, it was designed to accommodate foot travel. Those remaining older design elements comprise much of what is still uniquely attractive about the CBD: the narrow streets, small setbacks and interesting facades.



The many older and/or historic buildings in the area were built at a smaller scale and designed to attract the pedestrian eye. As such, these buildings are responsible for much of the charm and personality of downtown. These qualities need not be confined exclusively to older buildings. Skyscrapers and high-rises are important in creating an urban atmosphere and distinct skyline, yet care must be taken to avoid "dead spaces" or blank walls at street level. Retail and/or entertainment facilities should be encouraged at the street level of all appropriate buildings.

Redevelopment

As one of the oldest sectors of the city, redevelopment is a major issue in the CBD. Within downtown there are many older structures and uses which are no longer suited to the area. While an occasional empty storefront is a natural part of change, events should be monitored to separate isolated, temporary vacancies from larger trends which point to redevelopment opportunities. In many cases, although the use is no longer viable, the structure is worthy of preservation and reuse.

Redevelopment will most likely occur very gradually. However, even very small redevelopments should be guided by comprehensive planning. Combining the plan for the subarea which encom-

passes downtown with the Metropolitan Development and Housing Association's center city plan is a positive step toward comprehensive planning for downtown. This coordination should continue for smaller area plans which affect the CBD. Basic agreement should be reached on redevelopment goals such as urban design standards, historic preservation, open spaces and the land use mix in the downtown area.

GOALS AND OBJECTIVES

1. Develop a "24 hour" downtown by increasing the amount of residential, retail and entertainment activity in the area.

- * Make zoning and other policy changes which will encourage downtown residential uses.
- * Facilitate community scale shopping to serve downtown residents.
- * Continue to encourage a diversity of commercial size options within the CBD to accommodate tenants with a variety of space needs.
- * Achieve a compatible land use mix in the CBD frame area, where the majority of the residential uses are expected to locate.

2. Guide downtown redevelopment and expansion in an orderly pattern which will not interfere with other stated goals.

- * Identify the redevelopment opportunities in the CBD.
- * Closely monitor development/economic trends affecting downtown.

* Use MDHA plans and the downtown area's subarea plan to guide downtown growth and redevelopment.

* Facilitate the provision of incentives and/or assistance for redevelopment.

3. Ensure adequate accessibility to and within the CBD.

- * Create a safe and interesting pedestrian environment.
- * Make walking and mass transit circulators the preferred modes of travel within downtown.
- * Encourage alternatives to traditional above-grade and on-site surface parking facilities.

* Improve the mass transit share of CBD trips.

* Improve access between the interstate system and arterial street system downtown.

4. Preserve and enhance the features which make downtown distinct from other commercial areas.

- * Continue to promote festivals and special events, and encourage the development of permanent cultural/sport /entertainment facilities where feasible.
- * Avoid street level dead spaces which reduce the appeal of downtown for pedestrians. Encouraging retail facilities at street level can make the streetscape more interesting.
- * Encourage the preservation and reuse of architecturally or historically significant buildings.

- * Promote new development which is compatible with and respectful of significant buildings.
- * Provide the flexibility to make the use of significant buildings economically feasible while preserving their architectural integrity.

ACTIVITY CENTERS

Definition

Activity centers are areas of concentrated commercial uses that serve regional or super-regional markets and have substantial resident populations. As envisioned for Nashville, activity centers will be compact areas containing a regional shopping mall, ancillary retail space, consumer oriented office space, public facilities and higher density residential uses. The particular configuration of each activity center will vary, since factors such as surrounding residential neighborhoods, existing commercial development, transportation access, and topography will vary from center to center.

Structural Advantages

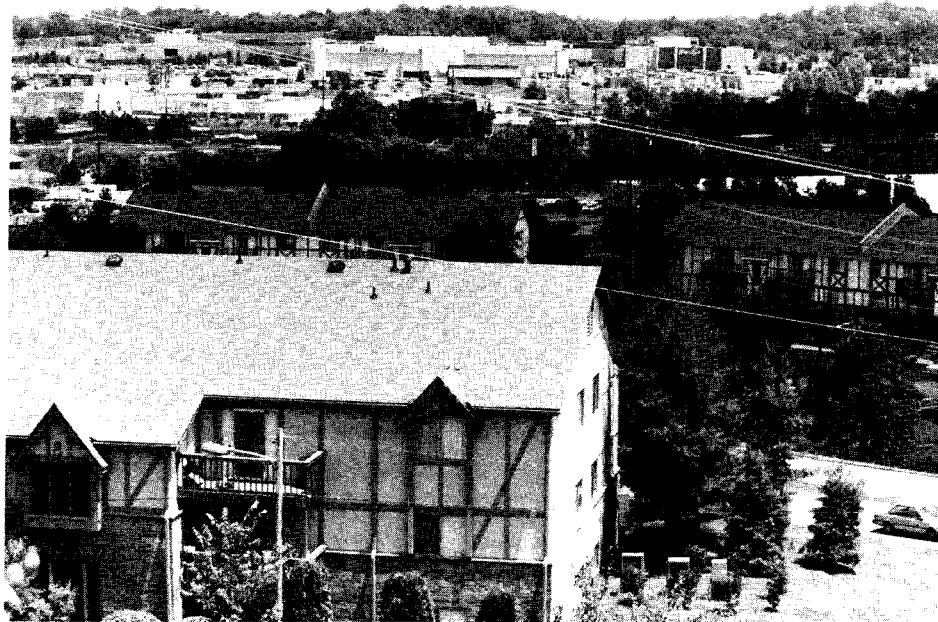
The purpose of promoting the activity center concept is to promote a more efficient urban structure. Greater efficiency is achieved in several ways:

- Creating several foci of activity encourages a more balanced pattern of growth and creates multiple employment centers, thereby reducing traffic congestion in the long run.
- Grouping like and compatible uses minimizes land use conflicts.
- Highly concentrated development results in less expensive urban service delivery costs and enables the development of more cost-effective modes of mass transportation such as light rail.
- Capital is more efficiently used by focusing finances in concentrated locations where infrastructural deficiencies can be addressed more comprehensively and effectively.

Necessary Factors

Each activity center will be somewhat distinct, both in appearance and content, but there are certain necessary elements which should be present in all centers, to varying degrees.

Retail: Each activity center will focus on a regional scale shopping facility, usually an enclosed retail mall. Some ancillary regional retail structures are also expected. Each center also should provide community and neighborhood scale retail to service the needs of the residential component. The total amount of



Multi-family housing overlooks the Hickory Hollow Mall

retail space will likely total about two million square feet within the core of the activity center, with the mall comprising around half of the total retail floor area. Additional retail may develop outside of the activity center core.

Office: The amount and type of office space may vary a great deal among the centers, but each should concentrate on developing appropriate office components. All centers should have at least community scale, service oriented offices. In general, office uses should be encouraged to locate in commercial concentrations rather than on isolated sites. Activity centers offer locations within commercial concentrations which would be particularly attractive for service-oriented offices. The total amount of of-

fice space within an activity center is not expected to exceed two million square feet, and may be less than half that amount.

Residential: Like the other components, the residential component may vary from center to center, but a mix of dwelling unit types and densities must be accommodated. Higher densities should be encouraged where appropriate, as they are a means to achieve compactness. Additionally, densely populated centers will make mass transportation more feasible and may provide for the opportunity to live and work within the activity center. Mass transit facilities such as light rail or express buses function best when there are at least 4,500 people within walking distance to transit

access points. This number may be used as a guideline for the provision of dwelling units within the activity center.

Public Uses: An activity center is to serve as the focal point for a large geographic area. Therefore, public facilities for that area are most logically sited within the center. Libraries, community centers, post offices, health clinics and mass transit centers are examples of appropriate public structures for activity centers.

Access: All centers should be easily accessible. For the most part, they will be located at the intersection of major arterials and interstates, and should be easy to get to by both automobile and mass transit. In the event that a light rail system becomes a reality, activity centers will make ideal locations for transit stations. Mass transit circulators should be developed within the activity centers.

Form: There are two interrelated form elements necessary in all activity centers: a pedestrian orientation and compactness. Once at an activity center, people should be able to walk safely among uses. In some cases, skyways or pedestrian bridges may be used, but the majority of the internal routes should be sidewalks or paths.

To facilitate pedestrian mobility, it is necessary that the center be compact. A general guideline is that the core of the center be no more than 1.5 miles in diameter.

Activity Centers and the CBD

Although the central business district has all the elements of an activity center, it is considered a separate entity unto itself, with a unique function. Where the CBD exists in large part because of its centrality, activity centers are located in outlying areas and are aimed at serving the more immediate and/or specialized needs of the smaller market areas. In general, the activity centers are meant to accommodate uses which are not suitable for the CBD, such as commercial facilities which require a great deal of land or offices which provide services and/or rely on a regular flow of patrons. Additionally, activity centers should be promoted as favorable alternatives for arterial office locations. Because of their specialized functions, activity centers should not detract from the viability of the CBD.

Design and Location

Activity centers have some unique locational and design requirements which merit special consideration. Care must be taken to ensure adequate access to the center and avoid the types of traffic congestion which are now apparent around some of the larger retail facilities. The ideal form is one which is compact and internally focused, yet allows the retail functions the visibility from the roadways that they need. The various functions must complement rather than detract from one another. The design of the interface area is of critical importance, as the center should

not adversely affect adjoining uses. Sub-area planning will be particularly important in assuring that newly developing activity centers harmonize with existing development.

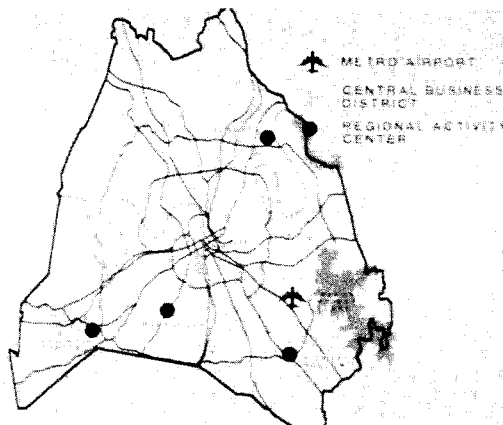
Potential Activity Centers

At present, there are four areas which have the potential to become activity centers. Each is anchored by a regional scale shopping facility which bears the same name as the area: Green Hills, Rivergate, Hickory Hollow and Bellevue. Although the four malls are somewhat similar in size, the development which has taken place around each facility differs. Ultimately, all four should contain enough of the necessary elements to make the activity center concept viable. At present, however, each area is lacking some of the necessary features of an activity center. Some of the deficiencies are correctable, while other situations may require creative compromises. For instance, Green Hills does not have direct interstate access, a condi-

tion which is not likely to change. Planning and funding efforts should be focused on these areas to create comprehensive activity centers, as conditions permit.

Future Activity Centers

Initially, centers will emerge from existing areas of highly concentrated retail activity. As the market and population growth demands, however, new activity centers may be needed. It is important to identify possible future locations and reserve land at a very early stage, due to the amount of land and other locational requirements of large scale mixed-use developments. Areas of the county which currently lack large retail concentration are logical places to monitor for future activity centers. While each center is different, some general criteria should be developed in the Principles of Land Use Application to guide locational choices.



GOALS AND OBJECTIVES

1. Promote a more efficient urban structure through the use of the activity center concept.

- * Develop land use policy patterns within subarea plans to articulate and enhance the activity center concept.
- * Develop Principles of Land Use Policy Application to guide activity center development, and ensure that the following elements are addressed:

- compact, internally focused and easily delineated form
- adequate access to minimize traffic congestion
- high visibility for their retail components
- the needs of pedestrians
- compatibility with adjoining uses

* Use the land use monitoring system to identify future activity centers. This process should be guided by the following consideration:

- potential market area and its existing and future needs
- regional economic and development trends
- cost and availability of land
- existing infrastructure
- environmental impact
- the relationship of the new center to the CBD and to existing or proposed centers.

2. Conserve public investment by focusing infrastructure development in activity centers.

* Evaluate all potential activity centers and develop strategies to rectify deficiencies.

The Green Hills Activity Center



COMMERCIAL LAND USE

Definition

Commercial activities are predominantly connected with the sale of products or performance of services. This includes retail trade, office space, personal and professional services, and entertainment facilities.

Classification

Retail establishments are generally classified according to the range of the market they serve. The most common categories include, in descending order of market size, regional, community, neighborhood and convenience scales. Although there is some overlap, each scale performs a corresponding function. Convenience, neighborhood and community scale retail provide every day, immediate goods, while regional and sub-regional retail provide more specialized goods.

Office uses can also be categorized by function and size. "Externally" or customer oriented office space is that which provides a service and requires a steady flow of patrons, such as medical offices. These uses tend to locate in areas that are conveniently accessible to other activities which draw a high volume of people, such as retail centers. Office uses which are in-

ternally oriented do not rely on regular contact with the general public, but may benefit from proximity to other businesses. Internally oriented uses tend to locate in office parks, the CBD or, in some cases, on isolated outlying lots.

Regarding scale, the same classification is used for externally oriented office as for retail; therefore a single dentist's office is neighborhood or community scale, while a medical arts building containing a large number of physicians may be regional or sub-regional in scale. Internally oriented office space can be classified according to physical size as expressed in square footage.

Locational Advantages - CBD

Because Nashville's CBD serves as the center for state and local government, it contains a fairly large, stable group of legislative offices and other businesses, such as legal services, which benefit from locations near government functions. Other office users locate in the CBD because it offers a variety of commercial activities in close proximity. The CBD's centralized location and traditional office setting are two of its most attractive locational assets. Although all types of offices can be found downtown, there tend to be more internally than externally oriented uses. The CBD should continue to be the most intensive commercial center in the county. Much of the retail activity downtown is directed at serving the office population. The economic health of the CBD could

be improved by encouraging a fuller complement of retail activities.

Locational Advantages - Activity Centers

The make-up of an activity center is almost the converse of the CBD. Retail is the dominant component of the center, while much of the office space is located there to capitalize on the flow of shoppers. The retail anchor is of regional scale, but smaller scale facilities will be attracted according to the size of the population in the center and its environs.

The office uses which are best suited to an activity center location are externally or consumer oriented. Internally oriented offices are not to be discouraged, but care must be taken to ensure that they reinforce the human scale and pedestrian orientation of the center. The office component of activity centers is meant to provide suitable sites for office activities which can benefit from that environment and location, not to provide competition for the central business district. Some office types have locational needs which can not readily be met by the CBD, such as the need for lower cost land or proximity to certain labor pools. Rather than allowing random, scattered site office development which produces an inefficient urban pattern, activity centers offer locational alternatives for these offices while promoting more orderly growth.

Super Community Retail Concentrations

Recent trends in consumer preferences and retailing practices have resulted in the emergence of a new form of retail concentration known as super community concentrations. Traditionally, community retail provided frequently needed goods and a few specialized goods for a group of neighborhoods. Most extensive shopping trips required a trip to a regional shopping center. However, consumer demand for more convenient, one-stop shopping and greater opportunities for discount and off-price shopping has arisen as the number of dual-income households has increased.

Retailers have responded to these changes by building larger stores which carry diverse stocks of groceries or general merchandise, as well as larger specialty stores with deep inventories of one type of goods, such as electronics or furniture. Where these stores group together, a retail concentration is created which is much larger than a traditional community scale concentration, called a super community concentration.

Super community concentrations serve many of the same functions as community scale concentrations, although their superior size allows for greater variety and depth of goods and services, and they may serve a larger market area. The relatively large size of super community concentrations requires additional planning to ensure adequate compatibility with surrounding

uses. Super community concentrations are not as flexible as community scale concentrations in regard to location. The level of traffic which they generate will usually relegate them to higher level intersection, such as that of a four and a six lane arterial. Density should be concentrated at the corners so that the amount of roadway frontage needed is minimized, and "stripping out" abated.

Although super community concentrations generally do not serve market areas as large as regional centers, they may serve market areas which extend over more than one subarea. Hence, when assessing commercial needs for a subarea, an area greater than the subarea should be examined to determine whether or not a super community concentration is appropriate.

"Strip" Commercial Development

Strip commercial development is characterized by strings of commercial structures along major roadways, with each business generally having its own access point. Strip commercial zoning was originally developed in conjunction with street car transportation and reflects a scale not efficient for modern transportation and infrastructure systems, and is usually aesthetically unappealing. Because many businesses along arterial strips preceded recognition of the need for design controls, they contribute to and are affected by traffic congestion, inadequate parking, and confusing and hazardous circulation pat-

terns. In turn, these problems affect the business by reducing visibility and making the uses very marginal. Although this type of development has been widespread in Nashville, it should be recognized that arterial access alone does not make a site suitable for commercial development. In general, arterial sites which are not at intersections or interchanges should not be considered appropriate for commercial development. Traditional strip development should be strongly discouraged.

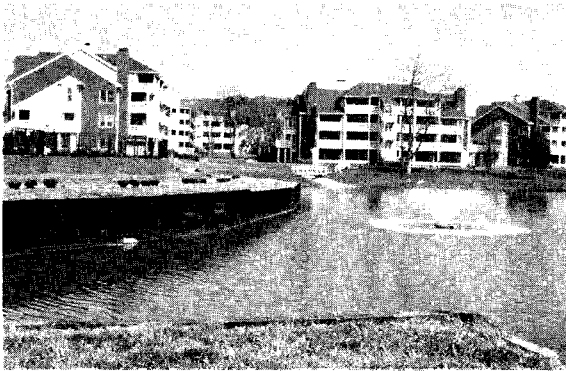
It is recognized, however, that there are some commercial uses which depend on arterial locations but may not fit well into a compact retail center. Uses such as car dealerships or lumberyards require large lots, good access and high visibility, making them prime candidates for arterial locations. Certain arterial com-

mercial uses such as these should be permitted, but should be strictly controlled regarding design. A distinction should be made between traditional strip development and limited arterial commercial development.

When opportunities arise, strip commercial areas should be redeveloped into a more compact and efficient development pattern, utilizing the proper design controls. The redevelopment of strip commercial is an extremely lengthy process, made longer if completely left to market forces. The land use monitoring system should be used to track areas of strip development which are shifting toward marginal uses and may be ripe for large scale redevelopment. In the meantime, efforts should be made gradually to correct the negative features of stripping, even though the



development pattern may continue for some time. Additionally, alternatives to commercial uses should be sought for undeveloped arterial sites. Higher density residential is the most likely alternate use, and should be encouraged to develop along arterials.



Office Submarkets

Certain office types benefit from locations outside of the CBD or activity centers. Smaller office concentrations may congregate at outlying sites which offer particular advantages such as proximity to transportation facilities, retail centers, or large tracts of lower cost land. Examples of these office submarkets include the Music Row area, West End Avenue near I-440, Metro-Center, and the airport area. A submarket may consist of an office park with surrounding ancillary development, or be composed of clusters of individual, free-standing structures. Generally offices comprise the major land use in a submarket, but there may be accompanying retail uses. Submarkets should

be guided by the same general principles as other commercial concentrations: minimizing sprawl by encouraging buildings to develop in compact clusters, and ensuring compatibility with surrounding uses through planning and buffering. When a submarket begins to emerge, the area should be monitored closely so that commercial planning goals can be realized.

Large Institutions

Although development is generally discouraged from occurring on scattered, isolated sites, some large institutions are not readily suitable for locations in any major type of commercial concentration because of their specialized site requirements. For instance, large institutions such as hospitals or universities which require substantial tracts of contiguous land are somewhat limited in their locational choices.

Specialized institutional uses such as these should be encouraged to locate on sites which will be adequate for anticipated long-term expansion. Good access is essential for large institutions, as they tend to generate substantial amounts of traffic. Auxiliary retail uses are often attracted to sites surrounding institutions. To the extent possible, the institution, its grounds, and surrounding associated uses should be comprehensively planned for. To assure the overall development pattern is appropriate, each institution's area should be ex-

amined through the subarea planning process.

Commercial Development

Growth will necessarily increase the demand for commercial space. It is critical to anticipate the types of office and retail facilities which will be in demand so that adequate space is available in the appropriate commercial areas: CBD, activity center, neighborhood center, etc. New development should be encouraged to locate in the most suitable commercial area, based on the requirements of the particular activity and its potential impact on the environment and existing development.

New commercial development outside of existing commercial concentrations may present potential land use conflicts, especially where commercial development is proposed in residential areas. Such land use decisions must be made in a fair and consistent manner, guided by the goal of enhancing and preserving the overall quality of life. Dialogue among commercial, neighborhood and government interests is essential in making informed land use decisions, and should be encouraged. The long-range plans for each contested area should always be considered; in some cases, it is apparent that the residential area will be changing, and the proposed commercial development may fit into that plan. The reasonable demands and expectations of all parties should be considered, but final land use

decisions should be based on the overall benefit each option would offer to the community, and how each development option fits in with long-range planning goals for the area.

Redevelopment and Re-use

The needs and demands of users of commercial space change at a relatively rapid pace. As commercial structures or areas are rendered obsolete, there is a tendency to abandon them and construct newer ones on undeveloped land. Marginal uses may move into the older structures, or they may simply remain unused. This phenomenon is understandable since businesses must seek the most profitable structures and locations available to them. However, this practice results in an over abundance of commercially zoned land, as well as a large number of unattractive and depressing vacant structures. Efforts should be made to revive commercially obsolete structures. In some cases, simple renovations might adapt the building for profitable commercial use; in other cases, industrial, residential or public uses might find the site valuable. The public and private sectors should work together to reduce the number of obsolete commercial structures through redevelopment or adaptive re-use.

GOALS AND OBJECTIVES

1. Promote an efficient urban pattern by grouping like and compatible commercial activities into the appropriate type of commercial center.

- * Develop commercial centers in a manner which will facilitate the widespread use of mass transit.
- * Carefully control activities which require sites outside commercial centers to avoid disruptive impacts on existing and potential development.
- * Recognize the emergence of supercommunity concentrations, and develop guidelines for their siting and transitioning.
- * Promote the clustering of structures within office submarkets.

2. Discourage traditional retail strip development and seek feasible alternatives for arterial sites.

- * Identify opportunities for redevelopment of strip centers, and institute design controls in emerging arterial development.
- * Facilitate the development of residential uses along arterials.

3. Provide for planned, orderly commercial expansion, development and redevelopment.

- * Anticipate the site requirements of future commercial growth and reserve land accordingly.
- * Direct new commercial development to the most appropriate commercial concentration.
- * Evaluate proposed commercial development in residential areas on the basis of the best possible long-term use for the

area, and the overall benefit to the community.

- * Facilitate dialogue between commercial and neighborhood representatives.
- * Encourage the redevelopment or adaptive re-use of obsolete commercial structures.

RESIDENTIAL LAND USE

Residential Pattern

The delivery of urban services is influenced to a major extent by the spatial pattern of residential development. When decentralized, non-contiguous and/or uncoordinated development occurs, many years may pass before the provision of some services becomes feasible, and a full complement of services may never become available. An uncontrolled random pattern of residential development would be contrary to and detrimental to the goal of providing primary urban services in a timely and efficient manner.

New residential areas should be developed at urban densities which allow for fiscally responsible service delivery. Within this parameter, densities should be made available in developing areas which accommodate various residential lifestyles and housing needs. In addition, densities must be appropriate to the carrying capacity of the land. Lower densities should be encouraged in areas where the natural

characteristics of the land would not support urban densities. In newly developing areas which are not expected to urbanize during the planning period, lower densities should be allowed to exist until urban densities become feasible. Existing neighborhoods which were developed below urban densities need not be redeveloped at higher densities if to do so would threaten the neighborhood's established character or stability. Where possible, infill and contiguous development should be promoted as preferable development patterns, while leapfrog and/or isolated development should be discouraged. As new development and redevelopment occur, potential effects upon infrastructure, the environment and surrounding development should be identified.



Development should be coordinated with essential services

Development of new residential areas should be coordinated with the availability of essential services, at urban standards. Sites which are or will be served by the full range of services (USD) should be favored over those where fewer services (GSD) are likely to be available during the planning period.

Neighborhood Design

Good neighborhood design can greatly enhance the livability of an area by making it more attractive to residents, reducing traffic congestion and minimizing land use conflicts. To foster a sense of community within each neighborhood, design elements should be employed which clearly delineate the area and facilitate good internal access. For instance, sidewalks should be used to promote pedestrian circulation within the neighborhood, and parks and elementary schools can be used to give the neighborhood a focus. Aesthetic concerns such as landscaping and street trees are also positive design elements.

A variety of housing types which suit different lifestyles and economic situations should be available across the county, and within each community. The detailed pattern of diverse housing types within neighborhoods should be guided by subarea plans. Efforts should focus on achieving both appropriate densities and compatible relationships among different types of housing.

Local public and convenience/neighborhood uses should be readily available to each neighborhood unit. Commercial functions whose presence would be disruptive should be discouraged. Ideally, neighborhood scale retail and public facilities would be clustered in a centralized location within the community. The group of residentially compatible uses can serve as a focal point and fosters a sense of community within the neighborhood. Special neighborhoods where a diverse pattern of compatible land uses is achievable should be encouraged and protected. Such mixed-use neighborhoods provide a unique and desirable living and working environment which adds to the range of lifestyle choices available to residents.

Planning For Spatial Transition

Central to good neighborhood design is providing for land use transitions. To preserve the integrity of a residential area, nonresidential uses must be adequately separated from dwelling units. In general, natural or man-made landscape features are preferred buffers, but situations often arise where this is



not possible. In these cases, transitional land use separators should be used. In general, the only nonresidential facilities which should be allowed within a residential neighborhood should be those uses which are oriented to serving that immediate area. Commercial and public or community uses which serve a larger market should be relegated to the neighborhood fringes, thus minimizing disruptions to the residential area.

Mixed-use neighborhoods require different planning principles than traditional residential neighborhoods. While a clearly defined separation of land uses is not necessary to provide a good living environment in these areas, care must be taken to ensure that a compatible mix and arrangement of land uses is effected.

Neighborhood Development

A key element of neighborhood conservation is achieving the proper mix and distribution of the various neighborhood elements. When conflicts arise between different land uses, the use which more closely corresponds with long-range planning goals for the area should prevail. Certain circumstances may arise by which development that may have detrimental effects on a neighborhood is sanctioned because it will be beneficial for the city as a whole. The construction of an airport is one such example where the benefit to the city outweighs the impact on a certain neighborhood.

In most cases, however, the positive and negative aspects of new development are not nearly as obvious as with an airport. These situations must be investigated thoroughly on an individual basis before action is taken. General considerations when examining a proposed development in a residential neighborhood include: the availability of suitable alternative sites, the presence of unique advantages of the site in question; and the type and degree of impact expected to be exerted on the neighborhood and its infrastructure. A potential increase in tax revenues for the city should not be the only criterion used in deciding if a development is to the benefit of the larger community. Such projects should be planned as far in advance as possible so that all options can be examined, and detrimental effects on any existing neighborhood can be mitigated.

GOALS AND OBJECTIVES

1. Promote an orderly pattern of new residential development at densities which will support the cost-effective delivery of urban service.

- * Allow for urban densities which will accommodate a variety of residential lifestyles.
- * Encourage the infilling of appropriate land and development contiguous to urbanized areas.
- * Discourage leapfrogging and scattered development.

- * Coordinate new residential development with the availability of essential services at urban standards.

2. Minimize conflict among different land use types within neighborhoods.

- * Maintain compatibility among different housing types.
- * Develop design standards to create effective transitional zones between residential and non-residential uses, incorporating landscape features or transitional land uses.
- * Relegate non-residential uses which serve larger markets to the fringes of the neighborhood, except in mixed-use neighborhoods.
- * Cluster neighborhood-oriented non-residential uses in a centralized location within the neighborhood.
- * Provide for the protection and enhancement of mixed-use neighborhoods.
- * Ensure a compatible mix and arrangement of land uses in mixed-use neighborhoods.

3. Resolve neighborhood land use conflicts in a consistent and fair manner.

- * Allow for the development of uses which will enhance the community's overall quality of life.
- * Consider other factors in addition to increased tax revenues when deciding if a development's contribution to the community's quality of life outweighs potentially negative impacts on a neighborhood.

- * Examine suitable alternative sites for a potentially disruptive use.
- * Identify potential effects of new development and redevelopment upon surrounding development, the environment, and existing infrastructure.
- * Consider both the short and long term effects of new development on existing neighborhoods.

INDUSTRIAL LAND USE

Industrial activities generally place a heavy demand on local resources, have the greatest impact on the surrounding environment and characteristically have less flexibility in locational choice than do other types of economic activities. Therefore, land use policies which promote the efficient utilization of industrial land resources are essential if optimum industrial development is to be realized.



The Ford Glass Plant in Cockrill Bend

Environmental Sensitivity

An overriding concern when siting any type of industrial activity should be its effect on the environment. The location must respect air and water flows, aquifers, and groundwater, as well as the more visible environmental features. Environmentally responsible industries are preferred over those which employ heavily impactful processes. Any new industrial activity should not materially impede the city's efforts to meet established environmental quality standards.

Site Reservation

In order to attract desired industries, it is necessary to reserve enough suitable land as is deemed necessary for future growth. Industrial activities should be located where adequate public facilities exist, where land use buffers can be established to separate and protect non-industrial uses, and where natural land characteristics are conducive to high site development intensities. The specific needs of certain industries, such as waterfront or transportation access, should be provided for. Accessibility for employees should also be considered. Due to the relative scarcity of industrial sites in Davidson County, once suitable industrial land is located, an adequate amount should be reserved exclusively for industrial use.

Industrial Parks

Negative impacts on existing development can be minimized through performance standards, used to create industrial park-type development. By clustering compatible industrial activities, the stock of suitable industrial sites can be more efficiently utilized. The mixing of different industrial-type activities such as wholesaling and manufacturing, should be encouraged to the extent that development of the principal activity is not impaired.

GOALS AND OBJECTIVES

1. Realize optimum industrial development through efficient utilization of suitable industrial sites.

- * Promote the use of industrial parks over isolated industrial sites.

- * Match industrial growth with existing and planned infrastructure.

2. Reconcile the impact of industrial activities with efforts to enhance environmental quality.

- * Carefully monitor the environmental impacts of new and existing industrial activities.

3. Reserve adequate sites to accommodate anticipated growth in preferred industries. A combination of raw and prepared sites should be reserved.

- * Identify sites which provide for the specific needs of desirable industries, such as proximity to transportation facilities.

4. Ensure that adverse impacts on existing development are minimized.

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Appendix A

General Plan Amendments And Additions

The Metropolitan Planning Commission, in accordance with Tennessee state law (T.C.A Section 13-4-201, et seq.) and the Charter of the Metropolitan Government of Nashville and Davidson County, must adopt a general plan for the physical development of Nashville and Davidson County. Furthermore, the Commission is empowered to amend, add to or carry any part of the subject matter of the general plan overview or its components to greater detail. The adoption of any amendment or addition to the General Plan or its component parts may be passed only by the affirmative vote of at least six members of the Commission.

Amendments or additions to any part of the General Plan will be considered on a quarterly basis. More frequent changes are not expected, due to the broad nature of the General Plan contents. The cumulative effects of any General Plan alteration on the practices and policies of the Metropolitan Government should be carefully considered before an amendment or addition is acted upon. Prior to the consideration of a General Plan alteration, the Commission must hold a public hearing for the purpose of allowing comment by the public. The public hearing will be conducted in accordance with the adopted Rules and Procedures of the Metropolitan Planning Commission that are in effect at the time of the hearing.

Appendix B

How to Read and Use the General Plan

The reader may have some difficulty understanding the relationship among the many documents that make up Nashville's General Plan. He or she may also not comprehend quickly the specific role of this particular document, the General Plan overview. This appendix is offered as help in understanding the comprehensive planning process.

A general, or comprehensive, plan is called upon to do at least two very different things. It is called upon to look long range, to provide a vision, to articulate desirable goals for the future. On the other hand, a general plan is called upon to tell us how to accomplish our long range goals, how to implement.

As examples, a visionary goal may be to improve transportation throughout the urban region to accommodate movement of people and goods during the planning period, 20 years. An implementation technique may be to build more highways, expand bus service, or develop a light rail transit system. Another visionary goal may be to improve the economic vitality of the Nashville region. An implementation technique may be to create an economic recruitment office to coordinate all business recruitment efforts for all government jurisdictions within the region.

This document, Concept 2010, is the part of Nashville's General Plan that provides the vision. It establishes the long range goals the community has agreed to pursue. This overview does not articulate specific strategies for implementing the goals, nor does it indicate what should happen in specified geographic areas of the county to fulfill the vision. These efforts are left to other components of the larger General Plan.

Having articulated the vision, the next step is to determine the best alternatives for implementation: the "how tos" of comprehensive planning. The choices or strategies for implementation are developed in documents called **functional plans**. There will be many of them: transportation, housing, parks and recreation, to name just a few.

If a transportation goal articulated in this overview document is continued efficient movement of people and goods, the transportation functional plan, the Transportation Plan, will articulate and investigate various alternatives like building new highways, or increasing existing mass transit, or introducing newer, more sophisticated forms of mass transit, or combinations of these. The Housing Study will suggest what measures need to be taken to maintain a better, more

affordable supply of housing, and what regulatory measures (improved codes enforcement, improved subdivision regulations) should be enacted to achieve this goal. The Parks Plan will establish standards for acquiring, developing and maintaining park land to have enough park and open space in the right locations as the community grows.

Once the vision is in place, and the means of implementation are stated in the functional plans, the next step is to articulate the role that each part of the county is to play in realizing the vision over the next twenty years. This process is accomplished through **subarea planning**.

Subarea plans commit the Plan to maps that explain what parts of the county should be used for residential, office, commercial and industrial uses; what areas of the county should remain as open space; what portions of the county should not urbanize at any time because of difficult terrain, floodplain or poor soils; what parts of the county may eventually urbanize, but are not needed during the planning period (20 years) to accommodate expected growth.

Davidson County has been divided into fourteen subareas. Each is being studied with the help of a citizen advisory committee from that subarea. Through about six months of study for each subarea, a detailed plan for future land use, utility extension and road improvements is developed. These plans, which must be consistent with the General Plan overview and the functional plans, will form a mosaic covering the entire county, and will become the land use policy map, a part of the General Plan.

The process is never completed. As soon as the process has gone full circle, it is necessary to evaluate how realistic the community's goals (its vision) are, how well the tools of implementation are working, to make whatever adjustments seem appropriate and to amend the subarea plans as necessary.

OVERVIEW (20 Year Plan)

- Themes
- Goals
- Objectives

FUNCTIONAL PLANS (Reviewed Every 5 Years)

Concept

Land Use Policy,
Economic
Development &
Housing

System

Transportation
Parks
Utilities

Informational

Forecasts
Environmental

14 SUBAREA PLANS

Implementation Tools

Zoning
Ordinance

Subdivision
Regulations

Capital
Improvements
Budget

Mandatory
Referrals

Long
Term

20 +

Medium
Term

5-10

Short
Term

0-6

County

Sub
County

GLOSSARY

ACTIVITY CENTER- An area of concentrated, mixed commercial activity that serves a regional market and has a substantial residential component. As envisioned for Nashville, activity centers will be compact areas containing a regional shopping mall, ancillary retail space, consumer oriented office space, public facilities, and higher density residential uses.

BUFFERING- Any of a variety of natural or man-made features provided between incompatible land uses to mitigate the effects of one activity from having an adverse impact on the adjoining land use.

CAPITAL IMPROVEMENTS- Large scale physical projects constructed or purchased to provide, improve or replace a public facility. The cost is generally non-recurring and may require multi-year financing. Examples of capital improvement projects include roads and sewerage systems.

CARRYING CAPACITY- The level of use that can be accommodated and continued without socially unacceptable degradation to natural or human resources.

CENTRAL BUSINESS DISTRICT (CBD)- Also referred to as downtown, the CBD is that section of a city which contains the major concentration of office and service functions, accompanied by a retail component. There are two divisions within the CBD: the CBD core and the CBD frame. The core is a densely developed area, usually delineated by multi-story structures. The CBD frame surrounds the core, is less densely developed, and often contains auxiliary land uses such as parking lots.

CLUSTER DEVELOPMENT- A development design technique that concentrates buildings in specific areas on a site to allow the remaining land to be used for recreation, common open space, and preservation of environmentally sensitive areas.

COMMUNITY FACILITIES- Facilities used in common by a number of people and often owned by the public, such as streets, schools, parks and playgrounds; also facilities owned and operated by non-profit agencies such as churches, recreation and neighborhood centers.

DENSITY- The number of structures per unit of land usually expressed as "per acre."

FIXED GUIDEWAY SYSTEM- A transportation system composed of vehicles that can operate only on their own guideways, which were constructed for that purpose. Examples are rapid rail, light rail and monorail.

GREENBELT- A network of narrow strips of land, usually located along natural or manmade features such as streams or roadways. Essentially, a greenbelt is a planned system of rural or open land to surround or to separate urban developments. The greenbelt is not a reservation of land for future urban development, but is designed as a permanent open space used for recreation and conservation.

GROWTH MANAGEMENT- A method to guide development in order to maximize the health, safety and welfare of the residents of a community while minimizing adverse environmental and fiscal impacts.

IMPERVIOUS SURFACE- Any material which blocks the seepage of moisture into the soil. It includes most conventionally surfaced streets, roofs, sidewalks, parking lots, and other similar structures.

INDUSTRIAL PARK- A large tract of land that has been planned, developed, and operated as an integrated facility for a number of industrial activities, with special attention given circulation, parking, utilities and compatibility.

INFILL- Development that occurs on vacant or underutilized land in built-up areas of a city.

INFRASTRUCTURE- The permanent, physical structures necessary to urban life, such as sewage disposal systems, potable water systems, solid waste disposal sites, stormwater systems, utilities, roadways and bridges.

INTENSITY- The degree to which land is used. Intensity can refer either to the level of concentration or to the level of impact which the activities on a particular site have on adjoining activities or sites. Intensity is generally used to describe the effects of non-residential activities, and can be measured by the amount of lot coverage or the ratio of floor area to lot size.

LEAPFROG DEVELOPMENT- Development that occurs beyond the existing limits of urban development and thus leaves large areas of intervening vacant land.

LIGHT RAIL TRANSIT (LRT)- A metropolitan electric railway system characterized by its ability to operate single cars or short trains along exclusive rights-of-way at ground level, on aerial structures, in subways, or in streets.

LIVABILITY- Also referred to as quality of life, livability is an expression of the standard of urban services, amenities and living conditions provided to residents of an area.

MAJOR ROUTE PLAN- The Major Route Plan represents both a long range functional plan for the improvement of streets and highways and a long range policy plan for transportation decision making for the Nashville urbanized area. The Major Route Plan is developed for the Metropolitan Planning Organization following detailed technical analysis and evaluation of existing and forecast transportation problems and issues and the development and evaluation of alternative transportation networks.

MAJOR STREET PLAN- That portion of the Major Route Plan which deals with Davidson County.

METROPOLITAN GOVERNMENT (Metro)- The government of Nashville and Davidson County, established on April 1, 1963. This government merged the governmental functions of Davidson County and the City of Nashville.

METROPOLITAN PLANNING ORGANIZATION- The entity mandated by federal law charged with the responsibility for coordinating transportation planning and implementation efforts in Davidson County and parts of several surrounding counties, especially the urbanized area as defined by the U.S. Census Bureau.

METROPOLITAN STATISTICAL AREA (MSA)- The MSA is used by the U.S. Census Bureau to describe urbanized areas which extend across political boundaries. MSAs are determined on the basis of detailed considerations regarding economic and social relationships, notably employment, commuting and trade patterns. As of the 1980 Census, Nashville's MSA consists of Davidson, Cheatham, Robertson, Rutherford, Williamson, Wilson and Sumner Counties.

OFFICE PARK- A large tract of land that has been planned, developed, and operated as an integrated facility for a number of separate office buildings and supporting ancillary uses with special attention given to circulation, parking, utility needs, aesthetics, and compatibility.

RETAIL- The sale of goods or services directly to the consumer. Retail facilities can be differentiated from one another on the basis of the types of products sold, and the trade area served

- *Convenience Scale Retail* serves a small, immediate trade area and provides goods and services which are needed frequently, such as gasoline and staple foods.
- *Neighborhood Scale Retail* serves the immediate neighborhood trade area and provides for the sale of food, drugs and sundries, and personal services. A super-market is generally the principal tenant in a neighborhood shopping center.
- *Community Scale Retail* typically serves several neighborhoods and provides both convenience goods, such as food, and limited shopping goods such as clothing and appliances.
- *Super Community Scale Retail* provides generally the same functions as community scale, although with greater range and depth of goods and services offered.
- *Regional Scale Retail* serve the largest trade area and provide a wide assortment of goods and services, including shopping goods, general merchandise, apparel, furniture and home furnishings. Generally a regional retail center will include at least one full-line department store.

RUN-OFF- Also known as overland flow, run-off is water produced by precipitation which drains by flowing over surfaces into waterways.

SERVICE DISTRICT- That area of a jurisdiction which is provided with a certain level of primary services. In Nashville there are two service districts: the general services district (GSD) and the

urban services district (USD). The USD covers the more densely populated portions of the county. USD residents are taxed at a higher rate than GSD residents, but generally receive a higher level of service.

STATE IMPLEMENTATION PLAN- A plan by which states outline actions, strategies and programs for attaining compliance with the federal Environmental Protection Agency's air quality standards.

SUBAREA PLAN- A planning document which is part of the General Plan. Nashville is divided into fourteen subareas, for each of which a subarea plan is developed focusing on specific issues or problems within that area. Through the subarea planning process solutions to the problems are articulated and a detailed twenty-year land use plan for the subarea is developed.

TEMPERATURE INVERSION- A meteorological condition that occurs when air near the ground is cooler than that at higher levels. Since the cooler air is heavier and tends to hug the ground, vertical mixing of air and dispersal of pollutants is blocked.

TRADE AREA- That geographic area from which a particular business or group of businesses is likely to draw customers.

URBAN STRUCTURE- The pattern or arrangement of a city's physical components; the transportation network, open spaces, and residential, commercial and industrial areas.

WATERSHED- A region or area bounded peripherally by a water parting and draining ultimately to a particular watercourse or body of water.

